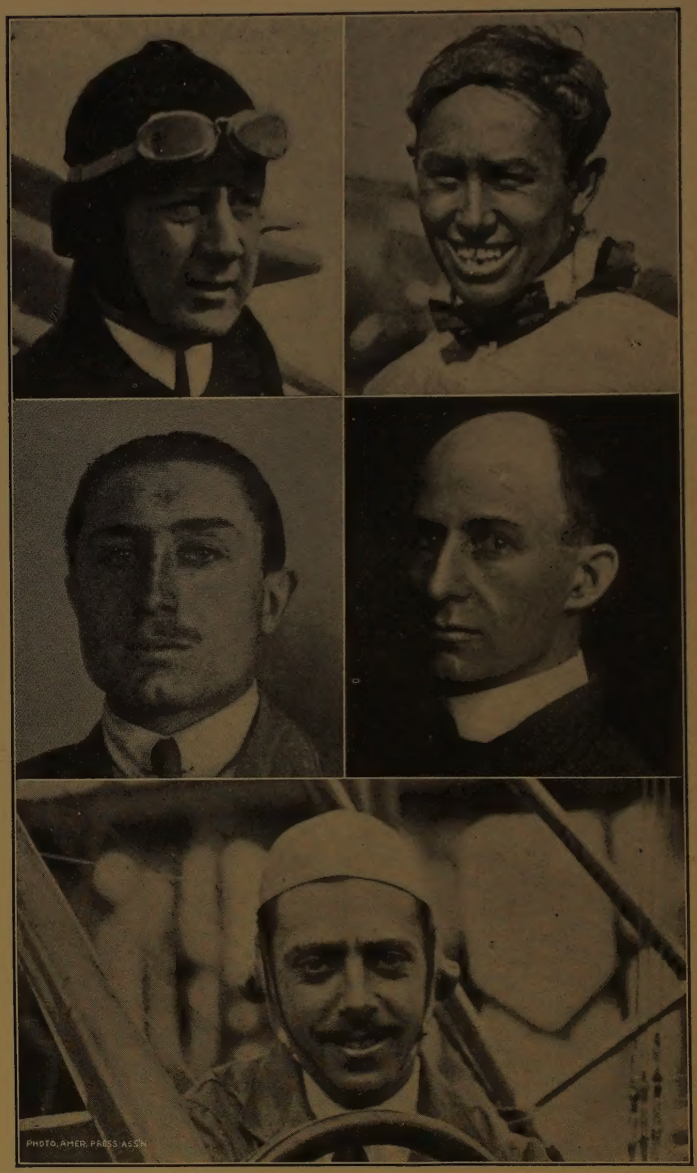
CHARACTER ANALYSIS BY THE OBSERVATIONAL METHOD



Ralph Johnson
Pilette

Ralph Mulford
Wilbur Wright

Villas

Automobile racers and aviators. Note round heads.

Character Analysis

BY THE

OBSERVATIONAL METHOD

KATHERINE M. H. BLACKFORD, M.D.

AUTHOR OF "THE JOB, THE MAN, THE BOSS" AND
"ANALYZING CHARACTER"

ARTHUR NEWCOMB, EDITOR

Lessons VIII and IX—PROPORTION (Continued)

FIFTH EDITION

New York

INDEPENDENT CORPORATION

1920

BOSTON MEDICAL LIBRARY

FRANCIS ...NTWAY
LIBRARY OF MEDICINE

Copyright 1915
By KATHERINE M. H. BLACKFORD, M.D
New York.

Copyright 1918
By KATHERINE M. H. BLACKFORD, M.D.
New York.

All rights reserved, including that of translation into foreign languages, including the Scandinavian.

LESSON EIGHT

PROPORTION (*Continued*)

HEAD SHAPE

I do not know why the shape of a man's head affects his character.

I do not know for a truth that the shape of a man's head does affect his character.

But I do know beyond the possibility of a doubt that certain head shapes are invariably associated with certain aptitudes, traits of character, and dispositions.

Several theories have been advanced to account for this correspondence.

Racial Theory of Head Shape.—One of these is what may be called the racial theory. Being of similar heredity and evolved in the same environment, men of the same race have, broadly, not only the same mental and physical characteristics but the same general head shape. Anthropologists hold that the shape of a man's head is the surest and best indication of the race to which he belongs.

Thus, say some anthropologists, Aryans are, as a rule, long headed; Asiatics, technically speaking, are broad headed; Sicilians are narrow headed; Russian Jews are round headed; Swedes and Scots are square headed; and Anglo-Saxons are high headed.

Similarly, Aryans are planners, builders, creators, and rulers; Asiatics are fierce, cruel and destructive;

Sicilians are mild and easy-going, and when they do fight prefer conspiracy, intrigue and ambuscade to open conflict; round-headed Jews are cunning and grasping; Swedes and Scots are cautious; and Anglo-Saxons are ambitious and aspiring.

There is probably much truth in this explanation but, on the other hand, it does not cover the entire ground.

Some Aryans have short, wide heads and, when they have, exhibit not "Aryan" characteristics but the characteristics of other races who have short, wide heads. Some Scots and Swedes are round headed and, when they are, they exhibit the characteristics of the round-headed man of any other race.

THE THEORY OF PHRENOLOGY

Another explanation of the correspondence between head shape and character is the theory of phrenology.

As is well known, according to this theory each faculty or particular activity of the mind functions through a certain area of the cortex or outer layer of the brain—what is popularly known as gray matter.

It was supposed by the originators and supporters of phrenology that the larger the area the more fully developed and the more active and powerful was the faculty functioning there. This theory is thus based upon two hypotheses:

Two Hypotheses of Phrenology.—First, that of brain localization or, in other words, the assumption that each faculty of the mind functions through some definite area of the brain;

Second, that of correspondence between brain size and brain power.

Dr. Gall and Brain Physiology.—The hypothesis of brain localization was first propounded by Dr. Franz Josef Gall. Gall was born at Tiefenbrunn, near Pforzheim in Baden, Germany, on March 9th, 1758. He obtained his medical education at Strassburg and at Vienna and received his doctor's degree in 1785.

Dr. Gall practiced medicine in Vienna for more than thirty years, and was at one time offered the post of Physician to the Court of Austria but declined.

From his earliest years, Dr. Gall was particularly interested in anatomy and physiology of the brain, and in the course of time became a brain specialist. His studies, dissections and plates of the brain were the most complete and perfect that had ever been made up to his time. He was the discoverer of many important facts in regard to brain anatomy which have since been universally accepted by scientific men. Prior to Gall's time the only dissection of the brain was made by cutting it up into slices. Gall was the first to follow the nerves of the brain to their endings and to disentangle and unfold the convolutions and other parts of the brain structure.

It was about 1796 when Dr. Gall first announced his hypothesis of brain localization. Dr. Gall is commonly called the founder of phrenology, but this is not strictly true. Dr. Gall never mapped the skull, assigning various faculties to various bumps. His work was entirely with the brain and his specialty was brain physiology. The brain areas he located were not located on the cranium but rather in the

convolutions, gyri, and other parts of the brain itself.

Dr. Gall's Work.—Soon after the announcement of his theories, Dr. Gall was forbidden to lecture on the subject in Vienna; and hence went on a lecture tour through Holland, Germany, Switzerland, and other continental countries. He was enthusiastically received in many places, among them the Royal Court at Berlin.

In 1807, after a long and successful tour, Dr. Gall settled in Paris, where he lived for the remainder of his life—about twenty years.

Spurzheim and Combe.—During part of his lectures, Dr. Gall had an assistant, Johann Kasper Spurzheim, who afterward severed connections with Dr. Gall and took his degree in medicine in Vienna. He later went to England, where in company with Dr. George Combe of Edinburgh he devised the system or theory of phrenology based upon Dr. Gall's discoveries.

Dr. Gall did not acknowledge or adopt the term phrenology and refused to be sponsor in any way for the works of Spurzheim and Combe.

In 1808, Dr. Gall submitted his researches to the Institute of France, which turned them over to Marie Jean Pierre Flourens for examination. Flourens made a few experiments upon pigeons, since proved to have been scientifically incomplete and erroneous in their methods and conclusions. As the result of these experiments, he condemned the theories upon which Dr. Gall had been working for more than thirty years. As a consequence they were declared unscientific by the Institute of France.

Spread and Standing of Phrenology.—Notwith-

standing this action by a scientific body, Gall's, Spurzheim's, and Combe's teachings soon spread with great rapidity all over Europe and the United States. In many quarters phrenology, as it came to be universally called, was held to be a science. There was a chair of phrenology in one of the Scottish universities.

Many of the most prominent anatomists, physiologists, physicians, philosophers, and other men of science of the day were enthusiastic in their acceptance. Among them were August Compte, the philosopher; Herbert Spencer, Dr. Conolly; Sir James Cox, the British Commissioner in Lunacy; W. A. F. Browne, Commissioner in Lunacy for Scotland; Sir James Crichton-Browne, M.D.; Dr. Daniel Hack Tuke; Sir Wm. C. Ellis; Dr. James Scott; Sir Samuel Wilkes, M.D.; Sir Wm. Turner, Professor of Anatomy in Edinburgh University; Moriz Benedikt, Professor of Neurology, University of Vienna; Dr. Guy, Professor Forensic Medicine, Kings College, London; Dr. Samuel Solly, Lecturer on Anatomy and Physiology of St. James Hospital; Dr. Laycock, Lecturer on Medical Psychology, University of Edinburgh; Dr. Howe, Founder of the Perkins Institute for the Blind; Archbishop Whately; Mr. John Morley; Rev. Henry Ward Beecher; Queen Victoria and her Consort, Prince Albert; Walt Whitman, and a host of others.

Opposition to Phrenology.—Naturally, any doctrine so new and revolutionary is subject to vicious attack upon the part of two classes of people: first, the exceedingly conservative; second, the ignorant.

At the time of Dr. Gall's researches, the truth that the brain is the organ of the mind had not been es-

tablished. In fact, Dr. Gall was one of the first to propound it. This theory was bitterly opposed by many on the ground that it was materialistic, and therefore atheistic.

Many well known men of science rose up and condemned the doctrine of Gall as being unscientific, pseudoscientific, and even charlatanism.

As the result of all this opposition, brain localization as propounded by Dr. Gall, and phrenology as formulated by Drs. Spurzheim and Combe gradually lost caste with scientific people and, as a result, with the public at large.

This result was hastened by the fact that many ignorant and unscrupulous itinerant lecturers and teachers claimed to present, give instruction in, and practice the science and art of phrenology. Some of them were mountebanks pure and simple, and their vagaries brought the whole subject into disrepute.

Gradually the men of science who knew Dr. Gall's teaching and believed it to be true passed away. On account of opposition and ridicule, younger men of science passed the subject over lightly, setting it aside without examination, until the time came when there was no one of really scientific mind to contend for the truth of brain localization.

This unfortunate condition of affairs turned back the wheels of progress in connection with brain physiology a hundred years.

Dr. Gall's Monumental Work and Discoveries.—Dr. Gall wrote a monumental work of four folio volumes and an atlas containing one hundred copper plate engravings on the anatomy and physiology of

the nervous system and the brain in particular. This book, however, owing to the aspersions cast upon Dr. Gall by scientific men, was not read by investigators. As a result, many of Dr. Gall's discoveries have had to be laboriously rediscovered by other men.

Among his discoveries were these:

(1) The successive developments of different parts of the nervous system, condemned at the time as fallacious by a committee of the Institute of France, now universally accepted;

(2) The enlargement of the spinal cord in the cervical and lumbar regions, opposed by scientific men in his day but now known to every medical student;

(3) The precedence of gray matter instead of white, opposed at the time, now adopted;

(4) The origin of nerve bundles from the gray matter;

(5) The structure and use of the ganglia;

(6) The proportion between the gray and white substance in the brain;

(7) The true origin of the optic nerve in the anterior pair of the corpora quadrigemina, opposed by all his contemporaries, now universally accepted;

(8) The origin of the olfactory nerve;

(9) The origin of the oculo motorius nerve;

(10) The origin of the trigeminal nerve;

(11) The origin of the nervus abducens nerve;

(12) The course of the motor nerves through the pyramids; cerebral peduncles, corpora stratia, " thus radiating like a fan, thus spreading out toward the periphery of the hemispheres ";

(13) The certainty of decussation of the pyramids, opposed by many of the highest authorities of his day, now universally adopted;

(14) The fibrous structure of the white matter of the brain, laughed at in his time, now known to every anatomist;

(15) The system of diverging and converging fibers of the brain;

(16) The simplicity of convolutions in newborn infants and in idiots compared with the complexity in the brain of the normal adult;

(17) The accurate description of many minor parts of the brain;

(18) The discovery of the speech center in the third frontal convolution, now known as the convolution of Broca;

(19) The localization of motor and sensory centers in the brain, since laboriously worked out by many investigators and now thoroughly established.

It is charged that many scientific men, after having obtained information regarding the anatomy and physiology of the brain, directly or indirectly, from Dr. Gall, afterwards claimed these discoveries as their own. Whether this be true or not—and there is abundant evidence in some cases that it is—the history of science to-day gives credit to men working from five to twenty-five years after the completion of Gall's work for discoveries which can now be found carefully and accurately described in Dr. Gall's book.

Furthermore, the researches and theories of Dr. Gall stimulated anatomists, physiologists and anthropologists to a more careful and thorough study of brain localization than ever before.

Progress in Brain Physiology Following Gall's Work.—In 1842, Marie Jean Pierre Flourens, of Paris, concluded, as the result of experiments, that the cerebellum, or lower rear part of the brain, is the seat of centers that co-ordinate muscular activities, and that the higher intellectual faculties are relegated to the cerebrum, or the upper and front part of the brain.

Following this, the German anatomist Meynert propounded the theory that the forward portions of the cerebrum had motor functions in preponderance, and the rear portions sensory functions.

In 1825, Dr. Boillard claimed to have located definitely a center for the articulation of words in the frontal lobe of the brain. Inasmuch as his experiments could not be verified, his claim was not accepted by the scientific world. Besides, Dr. Gall had discovered it years before.

In 1861, Dr. Paul Broca brought before the Academy of Medicine in Paris a case confirming Dr. Boillard's claim. One of Dr. Broca's patients had for twenty years been unable to speak because he could not remember words. When he died, an examination of his brain revealed that a certain convolution in the front part of the brain on the left side had been totally destroyed by disease, while the rest of the brain was perfectly healthy.

In 1870, the German investigator Fritsch Hitzig, by stimulating certain areas of the brains of animals with electricity, produced contraction of definite sets of muscles on the opposite side of the body. These experiments were repeated and extended by David Ferrier of London in 1873.

Following this, Franck and Pitries in France,

Munck and Goltz in Germany, and Horsley and Schafer in England began observations upon brain localization. As the result of this work, the definiteness of localization of motor functions in the outer convolutions of the cerebrum, or front and upper part of the brain, has become an accepted part of brain physiology.

Furthermore, it has been proved that the centers of vision, hearing, taste, and smell are definitely localized in the cerebrum.

Williams on Brain Localization.—Dr. Henry Smith Williams, in his book, "A History of Science," Vol. IV, pp. 275-6, comments thus:

"But such refinements of analysis, after all, cannot hide the fact that certain forms of higher intellection involve a pretty definite collocation and elaboration of special sensations. Such specialization, indeed, seems a necessary accompaniment of mental evolution. That every such specialized function has its localized centers of co-ordination, of some such significance as the demonstrated centers of articulate speech, can hardly be in doubt—though this, be it understood, is an induction, not as yet a demonstration. In other words, there is every reason to believe that numerous 'centers,' in this restricted sense, exist in the brain that have as yet eluded the investigator. Indeed, the current conception regards the entire cerebral cortex as chiefly composed of centers of ultimate co-ordination of impressions, which in their cruder form are received by more primitive nervous tissues—the basal ganglia, the cerebellum and medulla, and the spinal cord.

"This, of course, is equivalent to postulating the cerebral cortex as the exclusive seat of higher intel-

lection. This proposition, however, to which a safe induction seems to lead, is far afield from the substantiation of the old conception of brain localization, which was based on faulty psychology and equally faulty inductions from few premises. The details of Gall's system, as propounded by generations of his mostly unworthy followers, lie quite beyond the pale of scientific discussion. Yet, as I have said, a germ of truth was there—the idea of specialization of cerebral functions—and modern investigators have rescued that central conception from the phrenological rubbish heap in which its discoverer unfortunately left it buried."

Dr. William Hanna Thomson on Brain Localization.—A later investigator, Dr. William Hanna Thomson, Physician to the Roosevelt Hospital, and Ex-president of the New York Academy of Medicine, in his book, "Brain and Personality," makes the following statements, among many others of the same import:

Page 178.—"It is not with his whole brain that a man knows, thinks, or devises, but he does so in limited areas of one hemisphere thereof, which he himself has educated for the purpose."

Pages 184-5-6.—"Thus in the temporal lobe is found the original center of hearing. . . . But a whole group of centers becomes developed afterwards around the original auditory center, each one of which has learned what different kinds of sound mean. One of the greatest of these is that for music, and a divine faculty it is, because more than anything else it is the speech of the soul as it awakens to a communion with the great harmonies of the non-material universe. A true musician must have a

richly furnished shrine for the goddess of Music in his temporal lobe, and that he has it is proved by some persons who, after having been very fond of music, and able to tell at once whether they were listening to a composition by Mendelssohn, or one by Wagner, suddenly experience the sad misfortune technically termed *amusia*. No longer can they recognize any tune, however familiar, and in vain they try a violin or piano to bring back to them their departed joy. They *know* no music thereafter, the reason being that material damage has happened to the center in the temporal lobe which has been separately educated for music, just as another place in the same lobe has been separately educated for words."

It is interesting to note that this "music center" of the brain is located in the exact convolution assigned to it by Gall.

Physical Bases of Knowledge in the Brain.—Pages 186-7.—"Therefore while the ability to know is a great attribute of the human mind, yet these facts prove that there are actual physical bases in the brain on whose integrity as such this faculty can alone be exercised. An artist may be lost in admiration while gazing at the Sistine Madonna. An apoplectic clot may make him the next day, though still able to see that great picture, no longer able to distinguish it from a wall paper. A trained musician may be entranced at one time listening to a symphony of Beethoven, but in a few hours, though still able to hear it, he may be wholly unable to recognize it as music. In both cases a highly developed mental capacity is lost immediately after a local brain injury."

Page 189.—"Hence we learn to know just as we learn to think. We think in words, and for that

purpose we register our word memories in their laboriously prepared brain places. So also we register the memories of what we see and of what we hear in their prepared places."

Localized Memories in the Brain.—Pages 190-1. —"According to the physiological laws which we have already mentioned, memories of all kinds are doubtless registered in our brain cells by the original stimulus of each, and when an agency like conscious purpose systematically repeats the same stimulus to the same cells, they become arranged there in a library of records, as we have shown is the case in the speech centers. There is really nothing incomprehensible in this, for something quite analogous to it all is accomplished in that remarkable mechanism, the phonograph, in which layer after layer of its delicate receptive wax leaves may be found covered with all kinds of sentences, or entire songs with their tunes; while by a device similar to Broca's convolution, there come back again through its brazen throat the words, tunes, tones, and all else spoken into the machine. . . .

"From these considerations there can be no doubt that the exercise of every separate mental faculty is conditioned by acquired cerebral changes similar to those by which is interpreted all information coming by the eye and the ear. The brain thus comes to have places where memories are stored for the understanding of each special sensation."

Page 218.—"A person, therefore, acquires new brain capacities by acquiring new anatomical bases for them in the form both of brain cells, which he has trained, and of actively working brain fibers, which he has himself virtually created."

HOLLANDER'S "MENTAL FUNCTIONS OF THE BRAIN"

In 1901, Bernard Hollander, M.D., M.R.C.S., L.R.C.P., a distinguished physician in London, born and educated in Germany, published a work entitled "Mental Functions of the Brain." In this work, Dr. Hollander does several things:

(1) Declares that brain size is a uniform indication of mental capacity. He points out that the brain functions not only intellectually but emotionally and that when the brain is large and intelligence small it is easily proven that those brain areas which function intellectually are small, while the rest of the brain is large; that, conversely, when the brain is small and the intellect is large, it can be proven that the intellectual areas of the brain are large and the emotional areas are small.

Hollander's Proof of Brain Localization.—(2) He gives over 800 cases of local injuries, tumors, inflammations, hemorrhages, and atrophies of the brain, resulting uniformly in disturbances of the mental function localized by Gall in the part of the brain affected.

(3) He shows that the mental functions localized by modern investigators, such as memory of words, musical sense, and the motor and sensory areas are precisely the same areas as located by Gall for these same functions.

(4) He demonstrates that the skull is comparatively thin living tissue, and therefore subject to change in size and shape. He also demonstrates that the skull takes its shape from the brain, and not the brain from the skull, giving well attested cases

in which atrophy of a portion of the brain caused a depression in a corresponding area of the skull.

(5) He gives a history of Dr. Gall and his work and of phrenology.

(6) He gathers up, analyzes, and classifies the objections and the opposition to phrenology and answers them.

(7) He outlines August Compte's positive psychology based on Dr. Gall's physiology.

(8) He summarizes testimony as to the truth and usefulness of phrenology by eminent medical men.

Arguments for Brain Localization.—Dr. Hollander stands high among medical and scientific men, and his works, of which this is but one, are considered authoritative. Notwithstanding this, however, physiological psychologists, anatomists, and other men of science are extremely slow in accepting the theory of brain localization as applied to intellectual and psychical faculties.

There are many arguments in its favor.

For example, all brain physiologists of to-day agree upon the localization of the sensory and motor functions in the brain. Through one part of the brain the legs are moved; through another part the arms; through still another part the hands and fingers, etc., etc.

According to Professor James, emotions are physiological in their origin.

According to Delsarte and other teachers of expression, certain muscular motions uniformly accompany certain emotions.

Professor James would say they cause the emotions. However this may be, there is a uniform and constant correspondence between emotion and mo-

tion, so close that psychologists disagree as to which is cause and which effect.

If, now, the motor functions of the brain are definitely localized, why not the emotive functions?

For example, Dr. Gall localized firmness in the convolutions of the brain at the crown of the head. He called these the leg center. It has been demonstrated that these convolutions do control the movement of the legs.

It is a common saying that when one is firm about a thing " he puts his foot down "—a leg motion. It is also a matter of common observation that children stiffen their legs or kick when they are stubborn and obstinate.

A Question Science Must Answer.—All these established facts in regard to localization of motor and sensory brain functions lead to a pertinent inquiry: *If functions as predominantly intellectual and psychical as the memory of words and appreciation of art and music are demonstrably localized in the brain, why are not other intellectual and psychical functions also definitely localized in the brain?*

Science has not yet presented an adequate reply to this question. Some investigators maintain that there can be no such localization. Others content themselves with saying that there is no evidence of such localization. Still others admit that, while there is no evidence of such localization, there is no reason to believe it impossible. And some admit and teach systematic brain localization of all mental and psychical functions.

Some time in the future this vexed problem may be satisfactorily solved. We may have conclusive proof of the complete localization of all intellectual

and psychical as well as motor and sensory functions, or, on the other hand, we may have conclusive proof to the contrary.

Head Shape and Character.—Meanwhile, by many thousands of measurements and careful observation, I have reached the conclusion that there is invariably a uniform correspondence between head shape and character.

By head shape I do not mean "bumps," as a bump may be merely a thickening of the bony structure of the skull or an air chamber or sinus between the layers of the skull.

By head shape I mean the *general proportion of each part of the head to the other parts.*

By head I mean the cranium, or that part of the skull which contains the brain. This includes all of the skull from the eyebrows upward, including the temples and all that part of the skull ordinarily covered by hair.

The Physiological Center of the Brain.—If an imaginary line is drawn from the external opening—or, as it is anatomically known, the external auditory meatus—of one ear straight to the external opening of the other ear, the physiological center of the brain will lie almost exactly at the middle point of this line.

All head shapes are divided, therefore, with reference to this point.

Eight Shapes of Head.—For the purposes of the study of Proportion in Character Analysis by the Observational Method, we classify heads into eight shapes, namely, wide heads and narrow heads, long heads and short heads, high heads and low heads, square heads and round heads.

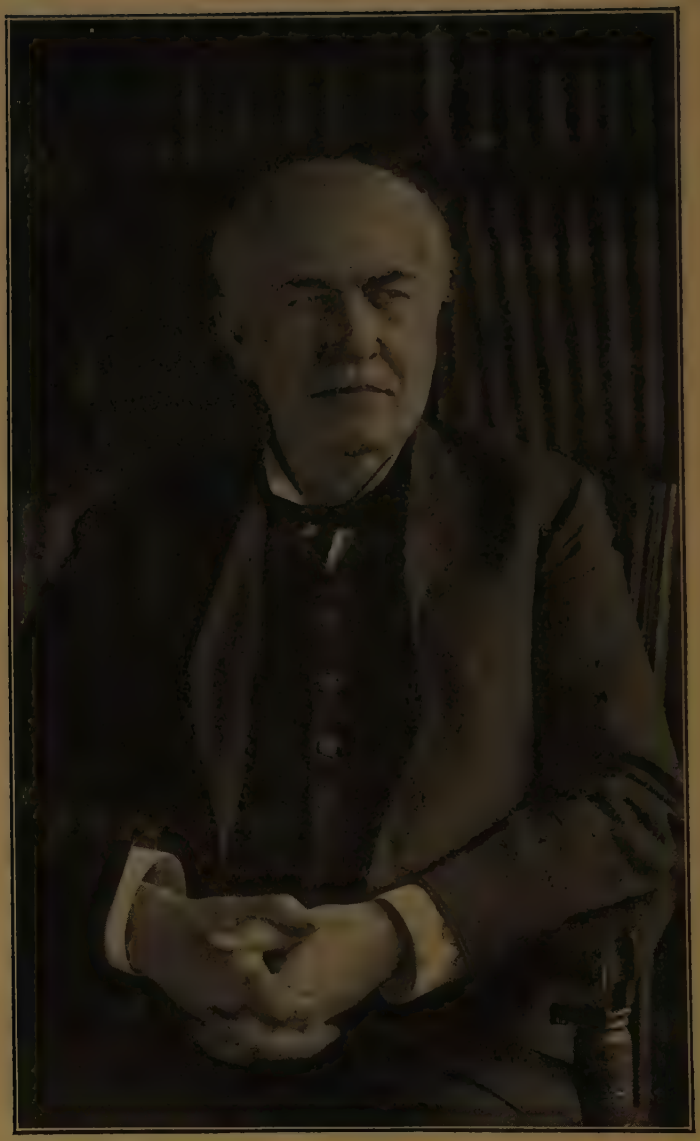


Figure 99.—Edison.

Anthropological Measurements Not Available.—Anthropologists have classified heads under these same divisions but their classifications should not be confused with those of Character Analysis, since their measurements are taken somewhat differently.

For example, in measuring the head for width, the anthropologist measures it at the point where the diameter is greatest. For the purposes of Character Analysis the head is estimated for width always at the same point, namely, the juncture of the upper portion of the ears with the side of the head.

The designations of head shape given by anthropologists cannot therefore be taken as a basis for the interpretation of aptitudes and character according to the principles of Character Analysis.

Head Shapes Defined.—For the purposes of this science, we define the different head shapes thus:

A wide head is one which appears wide from ear to ear when viewed from directly in front. The region of the cranium just above the ear and a little in front and behind the point just above the ear usually appears round and full. If, however, there is a good deal of fullness and width of the cranium still higher up, these sections will not appear so round and full, and may even appear flat, as in Figure 110. As will be seen in this figure, however, the head is wide at this point when compared with the width of the head at the brows. An examination of the heads shown in Figure 105 will reveal differences in shape, but the student will readily see that each one of these heads is wide. This is more apparent when they are compared with heads in Figure 108.

Ordinarily when the head is wide, the face also appears wide, and when the head is narrow the face appears long and narrow.

Figure 100.—Example of square head, front view.

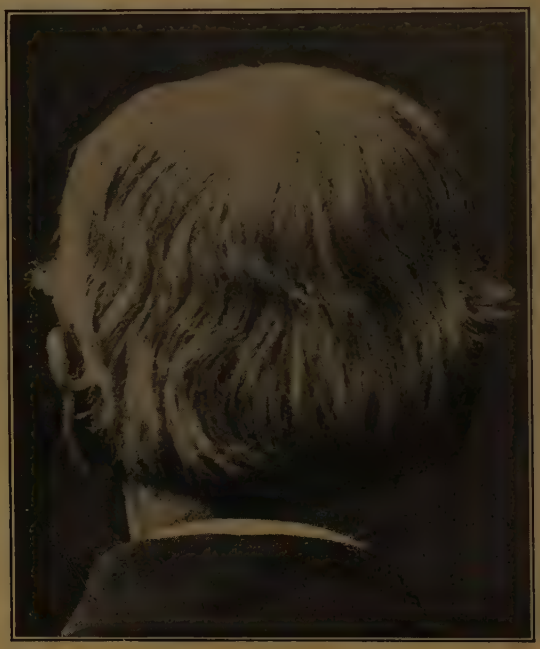


Figure 101. Head with square "corners" behind.

A narrow head is one in which the head appears narrow between the points just above the ears when viewed from directly in front.

This region of the head and other regions just a little in front of and behind it are not round and full but flat, as in the heads shown in Figure 108.

Flatness in this region, as we have already pointed out, is not always an indication of a narrow head, but if the head is not well rounded out and wide above this point, and this point appears flat, then the head is almost always narrow.

A long head is one which appears long from front to back when viewed in profile; one in which the lines from the external opening of the ear to the eyebrow and to the back of the head are long, as in Figures 117 and 118A.

Sometimes the line from the external opening of the ear to the back of the head may appear long, but the back of the head, while long, is narrow. In these cases the individual will not display the long-headed qualities to such a degree as the individual who has a full, round back-head, long from the external opening of the ear to the back of the head.

A short head is one which appears short from front to back when viewed in profile; one in which the lines from the ear forward and from the opening of the ear backward are short. Deficiency in the brows and forehead and in the back of the head, also, are indications of the qualities which are assigned to short-headed types. See Figures 114 and 116B.

A high head is one which appears high, both in front view and profile, from the external opening of the ear up, as in Figure 111.

Figure 102.—Round head, front view.

Copyright by Harris & Ewing, Washington, D. C.

Figure 103.—Round head, back view.

A square head is a head which has corners upon the forchead and upon the upper parts of the head behind. Of course, these are not actual corners but the appearance of corners is given by the fullness of the head at the points where the sides join the top back and front. See Figures 100 and 101.

A round head is one which presents a spherical or dome-shaped appearance in front and behind, as shown in Figures 103 and 113.

A head may be square in front and round behind, or it may be round in front and square behind. The shape of front and back-head should be noted separately, as different characteristics are found in each.

THE WIDE HEAD

Examine the pictures of animals, reptile, and bird shown on page 24. Note how in every case the head is wide in its general appearance from ear to ear.

Every one of these creatures is energetic, aggressive, fierce, and cruel. Every one maintains its own life by destroying the lives of other creatures. Every one is a fighter, an overcomer of obstacles.

Examine the heads of men on page 25. Note how every head is wide.

Every one of these men is energetic, aggressive, destroying that which opposes him. Every man is a fighter, an overcomer of obstacles. Some of them are exceedingly cruel and ruthless in their destruction of life and property. Others devote their energies to mental and material achievements.

These are the characteristics always to be found associated with wide heads.

How Energy of the Wide Headed is Expressed.—Just how an individual will manifest his energy, his fighting qualities, and his destructiveness depends

Figure 104.—Wide-headed animals, bird, and reptile.

Figure 105.—Some well-known wide-headed men.

Figure 106.—John Schrank, demented man who shot Theodore Roosevelt.

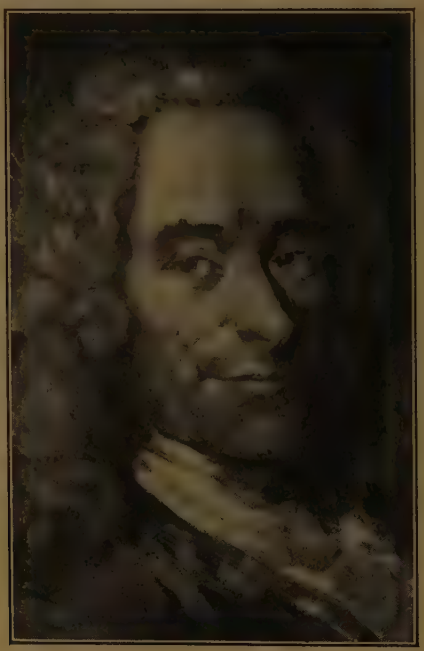


Figure 109.—Voltaire. Narrow, high, square head.

upon other proportions of the head and the indications afforded by the other variables.

Wide-headed energy and desire for action may take the form of accomplishment, of vigorous execution, of creative, constructive planning, or it may take the form of anger and mere wanton destructiveness.

One wide-headed man may show his tremendous energy, as did Andrew Carnegie, in the building up of a great industry, in the gathering together and successful handling of thousands of men, in the execution of great and ambitious plans.

Another man with a wide head may manifest his energy by tremendous physical activity, travel, hunting, fishing, horse-back riding, boxing, great public or political activity, and in general eagerness and strenuousness, as in the case of Theodore Roosevelt.

Another wide-headed man may manifest his desire for action in swift, blind, murderous rage, anger so terrible as to amount to insanity, as in the case of John Schrank. (See Figure 106.)

Many of the other variables affect and determine the direction which the energy of the wide-headed individual will take. If he is concave in form, he will probably be good-natured. If he has a large development of the optimistic, sympathetic section of the head, he is still more likely to be good-natured, and perhaps his energy will take the form of religious activity or philanthropic work.

The Wide Head—High or Low.—If he is high-headed, he will direct his energies along the lines of aspiration and ambition, and will also control his natural tendency to temper.

If he is low-headed, his energies will flow toward

Figure 107.—Narrow-headed animals, bird, and reptile.

Figure 108.—Narrow-headed men.

the accomplishment of his low ideals and, if the brain is large at the base, his energy is very likely simply to add intensity to his animal desires and passions and his efforts to gratify them.

The wide-headed child may be exceedingly bad-tempered, or his energies may simply expend themselves in noise, whittling, tearing up and breaking things—all good-naturedly enough and merely for the fun of it.

But, in whatever way the wide-headed individual may manifest his qualities, the keynote of his character, so far as head shape is concerned, is energy, sometimes expressed in fierceness, aggressiveness, and destructiveness.

Napoleon is a splendid example of a wide-headed man. So also is Colonel Goethals, who broke the backbone of a hemisphere and tore down a mountain.

Dr. Hollander gives clinical reports of many cases in which *mania furiosa,* or homicidal, destructive insanity, resulted from abnormal development, wounds, tumors, inflammations, and other affections of the brain in the region of the ear.

THE NARROW HEAD

Examine now the heads of animals, bird and reptile on page 28. Note how each head is narrow.

Each one of these creatures is mild, harmless, timid, and lacking in aggressiveness, strenuousness, and destructiveness.

Examine now the heads of men shown on page 29. Note how each head is narrow.

Each one of these men is mild, amiable, harmless, and lacking in aggressiveness, strenuousness and destructiveness.

How the Narrow Headed Express Mildness.—The manner in which the narrow-headed man manifests his mild, negative qualities will depend upon the other proportions of his head and other variables in his make-up.

But, whatever the other tendencies of his character, the narrow-headed man will in some way show his lack of driving energy, strenuous activity, aggressiveness, fighting qualities, and destructiveness.

It must not be supposed that because a man is narrow-headed he never accomplishes anything and is utterly at the mercy of the wide-headed, energetic, aggressive, fighting man.

The narrow-headed man oftentimes excels in diplomacy and tact. He is an adept in the use of the law of non-resistance. When he is also square-headed and long-headed, as he frequently is, he plans for the future, prepares for emergencies, thinks carefully before acting, makes few blunders, and by his quiet, far-seeing persistence may win far more often than many of his wide-headed brethren.

As we have already seen, the narrow head is one of the feminine physical characteristics, and people with narrow heads have to a certain degree some of the feminine qualities.

The Narrow Head in Combination.—A narrow-headed individual, with a large development of the sympathetic, optimistic, second section, and with a deficient chin, is optimistic, and hopeful, and therefore speculative and credulous. He is sympathetic and kindly, and therefore still more disposed to fall

Figure 110.—Medium wide, medium low, square head.

Figure 111.—Narrow, high, medium square head.

in line with those of more positive natures. He is therefore an easy victim to the wiles of clever and designing persons. Paint the picture of large gains or great accomplishment to him, and then set some plausible, positive person or combination of persons to giving him orders for making the dreams come true, and he becomes a willing and submissive tool.

In case the narrow head has a large development of the first or intellectual section, as is very frequently the case, the individual is a dreamer and a scholar, who theorizes and studies and philosophizes but is not particularly successful in acting upon his dreams and theories.

When the narrow head is associated with a large development of the third or crown section, the individual, while not manifesting great energy, still accomplishes much because of his dogged, unwearied persistence and perseverance. If his head is also square, he is cautious and prudent, and plans well ahead. Thus oftentimes he is far more consistent in his accomplishments and his successes than a much wider headed person.

If the head is both narrow and low, the individual is often a lazy idler. This is the type of man who becomes a tramp or beggar.

THE LONG HEAD

We have seen that the Aryans are a long-headed race. We have also seen that the Aryans plan, invent, create, organize, sell, advertise, and excel in politics and government.

The long-headed man likes to be with and handle people. He often sympathizes with and under-

Figure 112.—Wide, low, square head.

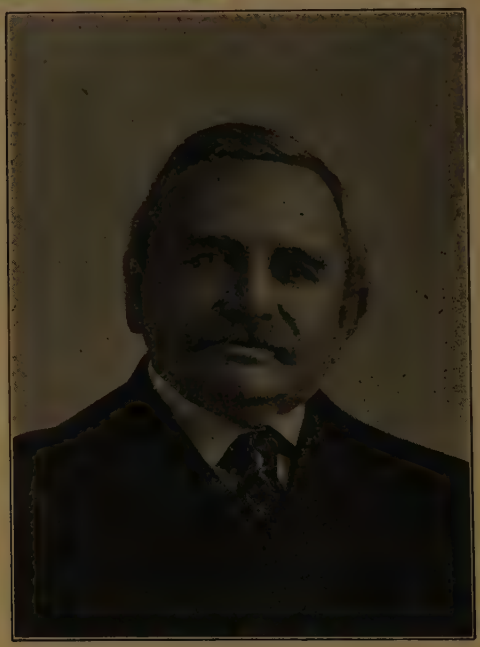


Figure 113.—Wide, medium high, round head.

Copyright by Harris & Ewing, Washington, D. C.

stands people. He is therefore able to look ahead and to forecast with a fair degree of accuracy how people will respond to any proposed course of action.

You will see that this ability of the long-headed man makes him successful as a politician, as a salesman, as an advertiser, as an organizer, and manager of people.

Long-headed men make successful business men and politicians. It is therefore not wholly a slang phrase to speak of those who look ahead and plan for the future intelligently and successfully as "long-headed."

Whether the long-headed man has a peculiar aptitude for politics or business or organization or selling or advertising or the handling of men industrially depends upon the other proportions of his head and the indications of other variables.

In whatever way, however, the indications of his long head may manifest themselves, its keynotes are always a liking for association with people, and, when coupled with squareness of head, a tendency to look into the future, and an ability to forecast the operation of causes and effects.

The Backhead in Politics.—During 1912, I attended two national political conventions. Before each of the conventions opened, I said to a party of friends who accompanied me: "Let us sit in the gallery where we can examine the delegates in profile. I can state confidently to you that every delegate in attendance will have a long head, especially full from the ears back."

Some of my friends were inclined to be skeptical, some even offering to wager that they could find amongst the delegates a certain number who were

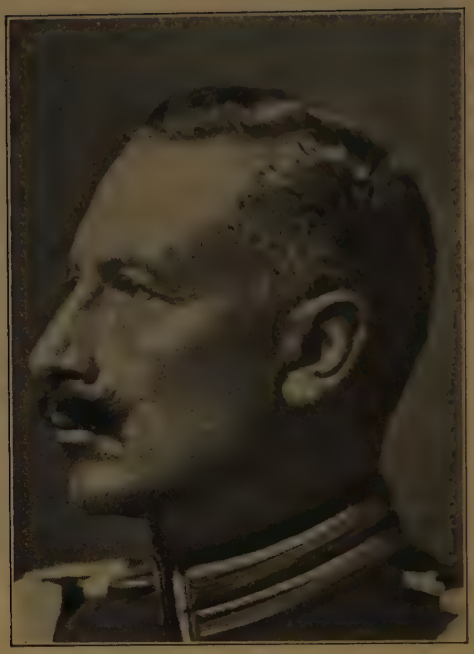


Figure 114.—Wide, high, short, round head.

Figure 115.—Wide, low round head.

not long-headed and whose heads were not full in the back.

When, however, we carefully observed each of the thousand and more politicians who sat as delegates, my friends were unable in either convention to find even one who did not warrant my description.

I will admit that I was taking a very slight chance, as occasionally some man who is not particularly successful in politics is chosen as a delegate, but it is very seldom indeed that a man who is not interested in politics becomes a delegate to a national convention. And it is the long head and the full back-head that make the politician, whether successful or otherwise.

The long-headed person naturally gravitates into business building, politics, social service, society, newspaper work or any other line of work or play that brings him into close contact with people, and success in which depends upon his ability to make friends with and influence others.

When the long-headed individual has large intellectual faculties, he may incline either toward statesmanship or toward authorship along political, economical, or social lines. Colonel George Harvey, Editor of the *North American Review,* is an excellent example of this type. (See Figure 117.)

THE SHORT HEAD

The short-headed man manifests in his character a deficiency of all the traits just described in the long-headed man. He is the kind of man who, as we say, "cannot see an inch beyond the end of his nose."

He does not look ahead or plan ahead. He is

Figure 116.—Ex-Governor Sulzer, of New York. Note narrowness in temporal section, showing lack of interest in financial matters.

Copyright, Pach Bros., New York

Figure 116B. Clarence Darrow. Example of short back head. Mr. Darrow's work as attorney for labor leaders and socialists is well known.

intent always upon the pleasures or the profit of the moment, with little thought of the future. He grasps everything in sight—materially, intellectually, or spiritually, as the case may be—oftentimes sacrificing great future values for the sake of temporary gain.

Since short-headed individuals neither sympathize with nor care particularly for others, they are selfish, grasping, and as a result frequently unsuccessful in their social, political, and business dealings with other people. Some of them may grasp considerable wealth, but they use it selfishly.

They order their lives with little regard for the laws of cause and effect, and are therefore constantly in trouble through consequences which they do not foresee.

Short Heads and Revolution.—The short head is the unsocial or anti-social head. The short-headed individual cares little for people and, according to other indications, is either indifferent to them, living the life more or less of a recluse, or exploits them. Sometimes the short-headed person fails to see the need for organized society and stable government. In such case he may often manifest this disability in anarchistic, revolutionary directions. In other cases the short-headed man may even commit crimes against others and against society.

The short-wide-headed man is often an energetic, hard worker. With other indications, he is an excellent salesman, especially if he is gifted with a smooth, plausible flow of speech. He is sometimes a good man to send to a new territory to open up the business but he is never a consistent business builder.

Figure 117.—Colonel George Harvey. High, long head.

Copyright by Harris & Ewing, Washington, D. C.

Figure 118.—William D. Haywood. Short back head. Mr. Haywood's leadership in syndicalism is well known.

Copyright by Underwood & Underwood, New York

The short-headed man may be cautious and prudent, which will go far toward overcoming the natural impetuousness and lack of consideration for others in his nature.

William D. Haywood, the agitator, is a good example of the short-headed man with revolutionary tendencies. (See Figure 118.)

Short-headed people should compel themselves to look ahead, to study their fellow men and understand them, to study causes and their effects, effects and their causes, and to cultivate their social natures.

THE HIGH HEAD

High-headed individuals are ambitious and aspiring. They have high ideals and principles. They are the people who accomplish great things, who uphold lofty ideals to the world.

Whatever the tendencies shown by the other proportions of their heads or the indications of the other variables in their make-up, high-headed people always manifest these tendencies along ambitious, high-minded, intellectual, artistic, idealistic, educational, philanthropic, or otherwise aspiring lines.

The direction in which a high-headed man's aspirations and ambitions lead him depends upon his color, form, structure, texture and the other elements in his proportion.

If he is a blonde, his tendency will be to aspire in promoting, organizing, creative, governing, selling, advertising, aggressive ways. If he is a brunet, his aspirations are more likely to be in the direction of the intellect, scholarship, literature, and art.

If he is convex, he is keen, practical, energetic, and

Figure 118A. Long, medium high, medium round head.

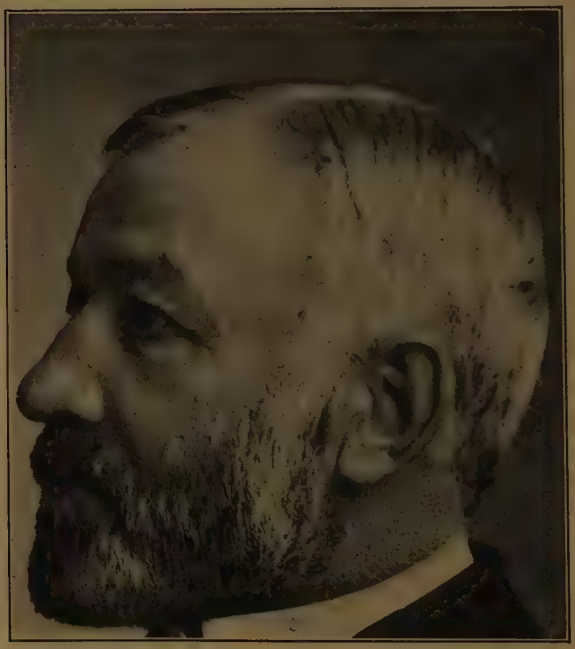


Figure 118B. Richard Croker. Long, medium low round head.

Copyright 1900, Rockwood

impatient in the pursuit of his ambitions. If he is concave, he is theoretical, patient, and plodding.

If he is of the mental type, his ambitions are along intellectual lines. If he is of the motive type, his aspirations lead him to physical activity, in some form or other, whether athletics, invention, construction, or some other similar occupation. If he is of the vital type, he aspires to financial, commercial, or judicial success and honors.

If he is of fine texture, his aspirations are in the direction of refinement, beauty and culture. If he is of coarse texture, they tend either toward great physical achievement or toward social uplift, or in some other way indicate his texture.

The high head combined with large development of the intellectual section means intellectual ambition; with a large development of the optimistic, religious section, means either commercial, religious, political, or financial ambition; when associated with a large back head, it means social ambition.

Senator Robert M. La Follette is a good example of the high, wide, long head, and his ambitions and aspirations are well known. (See Figure 119.)

THE LOW HEAD

Low-headed individuals are not loftily aspiring. Their ideals are not as high as those of high-headed men, although they may be just as successful in living up to them—in many cases, perhaps, even more successful.

Low-headed men are satisfied, as a general rule, to do the coarser, obscurer, more menial work of the world.

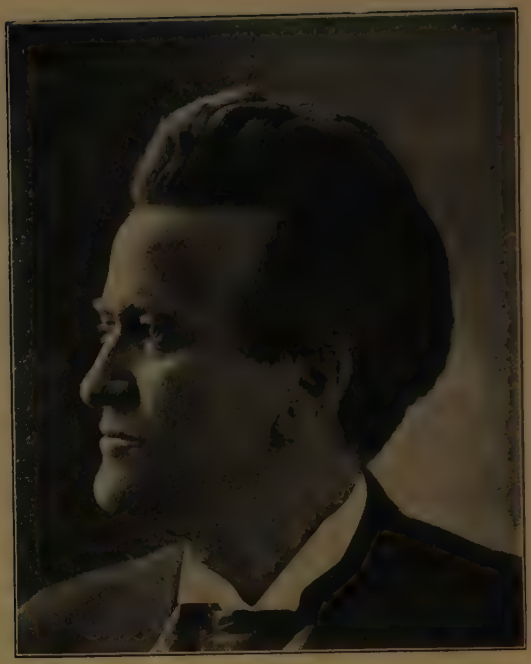


Figure 119. Senator R. M. Lafollette. Wide, high, long, square head.

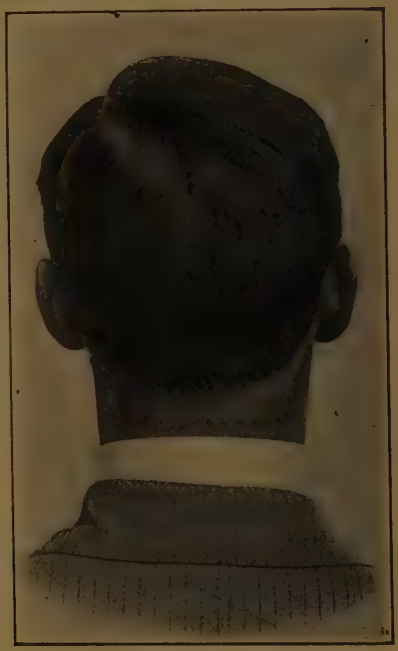


Figure 120.—Medium high, medium wide, medium round head.

Low-headed men are not necessarily unprincipled but their principles are not lofty. Oftentimes, however, a low-headed man will maintain his work-a-day ideals with far greater incorruptibility and tenacity of purpose than some high-headed men maintain their high ideals.

Compensations.—The low-headed individual may have other characteristics that will make up for moderation in aspiration and ambition and also for the sometimes low character of his ideals and principles.

Oftentimes these low-headed men and women are loyal, absolutely dependable, hard working, skillful and adroit. In some cases they are brilliant and possessed of a cleverness that amounts to genius.

Richard Croker, for many years the head of Tammany Hall and political boss of New York City, was not hampered in his political and commercial activities by any exalted and impracticable principles and aspirations, but he was a kind and generous friend, a good husband and father, and such principles as he had he maintained unwaveringly in the face of no matter how great opposition. His word was as good as his bond, and in his way he was loyal to his friends and to the people whose confidence gave him the power he wielded.

THE SQUARE HEAD

The square-headed man is thoughtful, prudent and careful. He is conscientious, reliable, dependable. He thinks and reasons and acts upon mature judgment rather than upon impulse.

The square-headed man is discreet and is seldom

in trouble as the result of imprudence, thoughtlessness, bad judgment, or impulsiveness.

Square-headedness, therefore, is one indication of deliberation, conscientiousness, and dependability.

For these reasons the square-headed man has a tendency to be sober-minded and "on the square."

These qualities are shown when the head is square both back and front. Note carefully, however, that it is squareness of the back-head which indicates prudent qualities. The special indications of the square and round front-head will be treated more fully under "Forehead" in Lesson 9.

Functions of the Square-headed.—If you want a man for any place, high or low, who is cautious, discreet, a man who will not be swept off his feet by enthusiasm, a man who will not jeopardize the interests in his care, be they small or great, by impulsiveness or irresponsibility, choose a square-headed man.

The square-heads are the governors upon the engines of human society. They are the conservatives. Their motto is not only "Look before you leap" but "Look and walk cautiously instead of leaping."

In religion they are orthodox. In politics they are conservative. In all walks of life they tend to cling to that which has been tested and is known to be safe.

THE ROUND HEAD

The round head is an indication of carelessness, recklessness, impulsiveness, and cunning.

The round-headed man is governed largely by his feelings. He loves to take chances. He is often of the speculative, gambling type.

His rashness, imprudence, and impulsiveness are always carrying him headlong into situations of difficulty from which he tries to extricate himself by the same headlong, thoughtless methods.

Lacking prudence and forethought, round-headed people often resort to cunning and strategy to attain their ends. They usually predominate amongst plotters, conspirators, and intriguers.

Functions and Tendencies of the Round-headed.—When the head is high and long, as well as round, as in Figure 120, the individual manifests round-headed qualities in courage—pushing toward achievement of their aspirations without regard to the hardships and dangers they may suffer on the way.

If you are looking for a man to drive a racing automobile, or to loop-the-loop in an aeroplane, or work in a position of great danger, or break into a multimillionaire's office to sell him a set of books, or to do anything else that requires a certain amount of recklessness and impulsiveness, then choose a round-headed man.

Many positions involve considerable danger, and for that reason would seem to require caution and carefulness; but the trouble is that the careful, cautious man simply will not work in such a position, while the rather reckless, fearless fellow is perfectly willing to take a chance.

Examine the pictures of automobile racers and aviators on frontispiece and note characteristic roundness of head in them all. Watch other men who take their lives in their hands in their daily occupations and see how round their heads are.

You will also find the round heads amongst the

agitators, the innovators, and the radicals in all walks of life. Go to a socialist or anarchist meeting some time and look over the heads there assembled, and you will have an excellent opportunity to study the round head and its manifestations.

COMBINATION TYPES

Naturally, the different types of head shape always occur in combination. Every head is either wide or narrow, long or short, high or low, square or round.

There are just sixteen possible combination head shapes, as follows:

Wide-high-long-square;
Wide-high-long-round;
Wide-high-short, square;
Wide-high-short, round;
Wide-low-long-square;
Wide-low-long-round;
Wide-low-short-square;
Wide-low-short-round;
Narrow-high-long-square;
Narrow-high-long-round;
Narrow-high-short-square;
Narrow-high-short-round;
Narrow-low-long-square;
Narrow-low-long-round;
Narrow-low-short-square;
Narrow-low-short-round.

In order to give you a start, let me analyze for you a few of these combinations, so that you may be able not only to continue and analyze the remainder for yourself, but so that the significance of each head

shape may be more deeply impressed upon your mind.

The Narrow-High-Long-Square Head.—The man who has a narrow-high-long-square head is ambitious and aspiring, but mild and easy-going. He is not much of a fighter but, being far-sighted, he reasons his actions out and looks ahead. Being careful and prudent, he avoids the necessity of combat through tactfulness and diplomacy.

The Wide-Low-Short-Round Head.—The man whose head is wide-low-short-round is energetic, enthusiastic, and destructive. He has low ideals, is grasping and selfish, short-sighted, impulsive and cunning.

The Wide-High-Long-Square Head.—The individual who is blessed with a wide-high-long-square head is ambitious and aspiring. He looks ahead and plans for the future. Having high ideals and strong reasoning power, he uses his energy in overcoming obstacles, conquering difficulties, executing his plans, rather than in a destructive way, and is careful and prudent about putting his plans into operation.

The Wide-High-Short-Round Head.—The man with the wide-high-short-round head is energetic, forceful and aggressive. Having high ideals, he directs his energies along idealistic and aspiring lines. As indicated by his short head, however, he is short-sighted, does not lay his plans well, and is constantly falling far below his ideals on account of his haphazard, unpremeditated courses of action. As indicated by his round head, he is impulsive, cunning, imprudent, rash, and constantly blundering into situations out of which he depends upon his fighting qualities—indicated by his wide head—to extricate him-

Figure 121.
Long, high head.

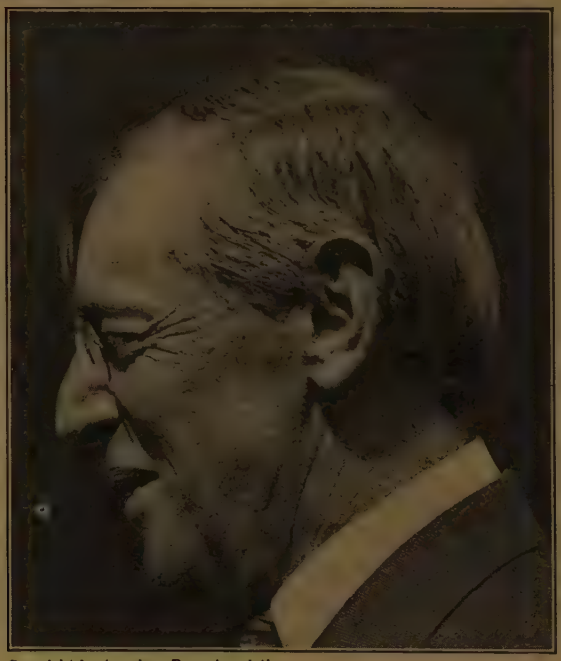


Figure 121A.
President Woodrow Wilson. High, medium long, medium square head.

Copyright by American Press Association

self. The selfish, grasping tendencies, indicated by his short head, are constantly in conflict with his high ideals, lofty principles, and aspirations, and as a result he is ever impulsively turning from one set of motives to the other.

In this manner, you can work out the indications of each of the sixteen combinations of head shape. Here, as everywhere in this science, the key to success is faithfulness to the principles. In case any variation does not manifest its indications as you at first expect, do not be discouraged. Keep on studying the case until you find out why.

I recently met a wide-headed man who hates to walk—will take a car when he has no more than a block to ride.

Where is his energy—his desire for action? At first it did not appear. But investigation discovered two explanations:

First, he was a little inclined to be gouty;

Second, his energy was so intense that he drove his automobile furiously—walking was too slow for him.

PART TWO

In observing head-shape it is obviously impossible actually to measure the heads of the people we desire to analyze.

Even if it were possible to measure them, measurements would be found a very unsatisfactory method of arriving at their shape. Some heads are small; other heads are large.

A small head may be high, wide and long, and a large head may be low, narrow and short. This may appear to be paradoxical, but it is not, because the

high head is shown by the largeness and fullness of development from the ears up, the wide head by the roundness and fullness of development just above the ears, and the long head by the fullness of development at the brows and in the back. These are obviously proportionate or relative measurements rather than absolute. They refer to the roundness, fullness and development of the regions of the head rather than to actual or even proportionate length or width in inches or centimeters.

For this reason, the student will save himself much trouble if, at the very outset of his observations of head-shape, he will dismiss from his mind entirely all questions of measurements and will devote his attention entirely to a study of the illustrations in this lesson until he has a clear and unmistakable mental picture of just what the different head-shapes are.

It is obvious even to the most casual observer that the heads in Figure 105 are wide and the heads in Figure 108 are narrow. This, of course, is because they are rather distinct types.

As I have counseled you before, it is always well to begin making your observations with the distinct types, since there is no possibility of your being in error in your observations and it is far easier to trace the characteristics indicated in the extreme types than it is in those more nearly balanced.

When you begin making your observations for head-shape, therefore, if you are perfectly sure that a head is high or low, wide or narrow, long or short, round or square, class it in this way and look for the characteristics and traits indicated accordingly. If, however, you cannot be sure whether a head is high or low, wide or narrow, long or short, round or

square, call it medium. Be satisfied at first with this rather loose classification. You cannot go far wrong if you do. As you acquire more practice and observe more heads, you will be able to make the more exact classifications, such as extremely high, medium high, medium low, low and extremely low.

Another good plan is to refer to the illustrations in this book when you are puzzled as to how a head should be classified. See if you cannot find among the illustrations a head of somewhat the same general shape and notice how it is classified here.

A further consideration of the subject of proportion will be continued in Lesson Nine.

LESSON EIGHT

REVIEW QUESTIONS FOR SELF QUIZ ONLY

(NOTE: These questions are given to check yourself up to see how thoroughly you have mastered the lesson. Answers are not to be sent to the author or the publisher.)

I. What are the two hypotheses upon which phrenology was based?

II. What important question must science answer in regard to brain localization?

III. Where is the physiological center of the brain?

IV. Name eight shapes of heads.

V. Name two traits of character indicated by a wide head.

VI. Name two traits of character indicated by a long head.

VII. Where is the width of the human head always observed for the purposes of this science?

VIII. Why are successful politicians usually long headed?

IX. Why are absolute measurements unreliable in determining head-shape?

X. Describe briefly some of the characteristics of a man with a narrow, high, long, square head.

LESSON NINE

PROPORTION (*Continued*)

THE HEAD AND FOREHEAD

The proportionate development of various divisions and sections of the head reveals much as to aptitudes and character.

For convenience in observing and interpreting certain proportions of the cranium, I have divided it into three divisions—from base to top—and into four sections—from front to back.

Both my nomenclature and the lines of division are, of course, arbitrary. Many other divisions are possible. But I have found these best for checking up and verifying the indications of head shape and other variables, and for gaining more detailed information than is possible from head shape alone.

The interpretation of these variations in proportion is based upon observations of some of my predecessors in this field, and upon further observations of my own, verified by extended investigations.

THREE DIVISIONS OF THE CRANIUM

Every human cranium may be divided roughly into three divisions. These divisions are the base, the middle, and the top.

Three imaginary lines are drawn around the head obliquely to fix roughly the boundaries of these three divisions.

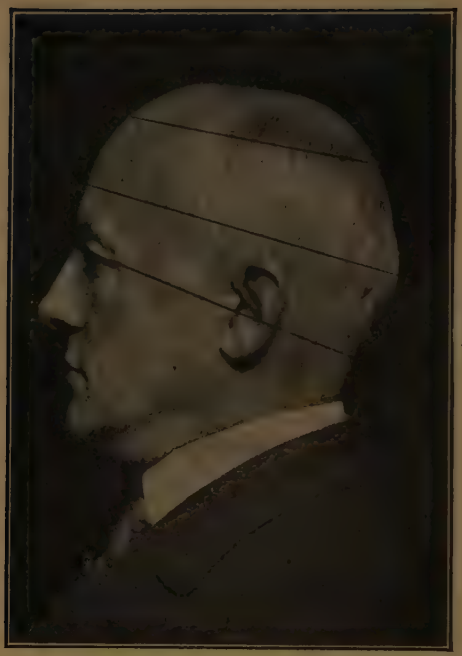


Figure 122. Base, middle, and top divisions of the cranium.

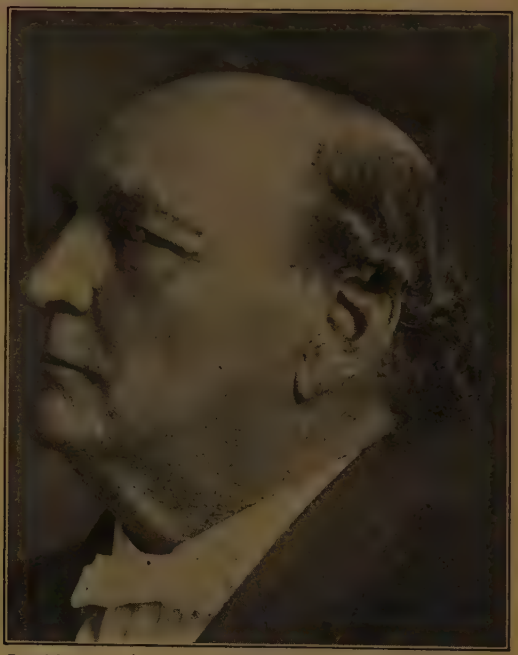


Figure 123. Large base division of cranium especially in front of ears.

Copyright by Bert G. Covell, Birmingham Ala

The first is drawn just below the eyes, just below the external opening of the ear, and around the hair-line at the back of the head, as shown in Figure 122.

The second is drawn from about or a little below the middle of the forehead (in many individuals marked by an indenture) around the side of the head at about the level of the upper rim of the ear, and around the back of the head through the occipital spine, or little bony protuberance in the center of the lower part of the back of the head.

The third is drawn from the hair-line above the forehead through a point a little above the middle of the back of the head where the parietal bone of the skull joins the occipital, as shown in Figure 122.

That part of the cranium between the lowest and middle lines is called the *base;* that between the middle and upper lines the *middle;* and that between the upper line and the top of the head the *top* division.

In discussing these three divisions of the head we shall call the distance between the lines the *height* of the divisions. The other dimension of each division is its circumference.

These three divisions vary in different craniums in their proportionate height and in their proportionate circumference. And the lines dividing them may not be parallel. In nearly every case the top division is both lower and smaller in circumference than either of the other two.

For example, in one cranium the base may be both higher and larger in circumference than one or both of the other two. In others the middle division will be the larger; in still others, perhaps, the top division

Figure 124.
Predominant middle division of cranium, especially in front of ears.

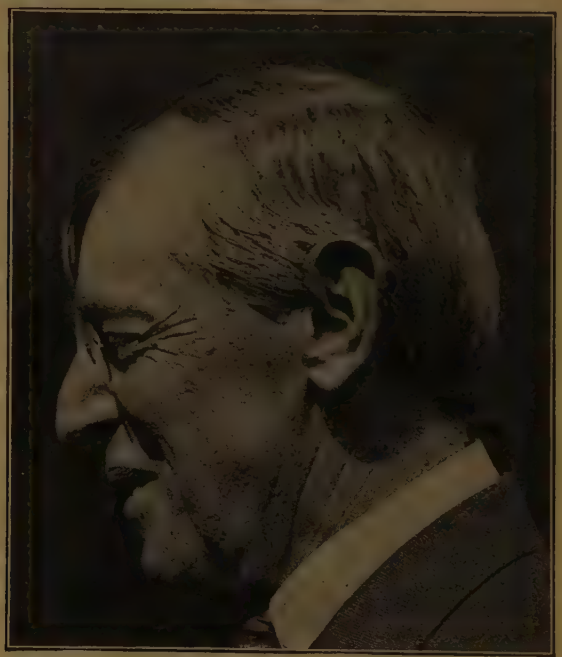


Figure 125.
Well balanced divisions of cranium.

will be larger in proportion to the other two than in the average head.

Either greater height or greater circumference, or both, in any one of these divisions indicates a proportionately greater development of the division and of the characteristics indicated.

In the balanced head the middle is slightly higher and greater in circumference than the base or the top.

THE BASE OF THE CRANIUM

When the base predominates, its boundary lines are proportionately longer than the other line, and the distance between them is proportionately greater, as shown in Figure 123.

When the middle division predominates, its boundary lines are proportionately longer than the other line, and the height of the division is proportionately greater than the height of either of the other two, as shown in Figure 124.

When the top division of the cranium predominates, its height and its circumference are large in proportion to the other two, but the simplest way is to observe whether the upper two-thirds or the lower two-thirds predominates.

The proportion of these three divisions one to another *indicates the proportion of animal, material and ethical qualities* in the individual.

Physical Nature Strong.—When the base of the

Copyrighted by G. V. Buck, Washington, D. C.

Figure 126.—A group of American engineers.

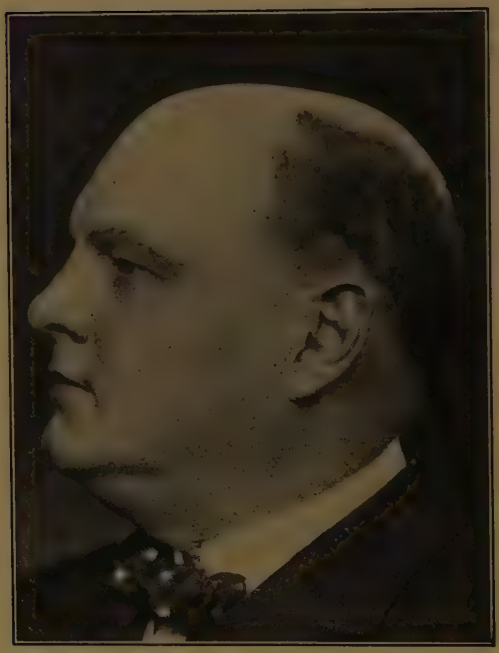


Figure 127.—Predominant base division in individual of vital type.

Copyright, 1901, Rockwood, N. Y.

cranium is well developed, the individual has keen physical senses. He sees well, hears well, is observant, and has keen appreciation for the physical properties of things as observed by the senses. He forms accurate judgments as to relative sizes of objects, distinguishes between colors, is shrewd and calculating; frequently has a marked development of the sense of time and tune; is interested in people and events, and usually has a good memory for concrete, practical things. This is especially true when the base predominates from the ears forward.

All of these keen sense perceptions man has in common with animals, although in many cases special senses in animals are even more highly developed than in man.

Individuals with the base of the cranium large frequently have marked ability to build and construct. This is especially true when the base is wide in front of and a little above the ears. Notice the development here shown in engineers. (Figure 126.) Their keen sense perceptions and accurate judgments of size, form, and weight, and their ability to calculate are of great assistance to them in the making of either fine, delicate, beautiful things in case their texture is fine, or large, heavy, powerful things—such as bridges, railroads, dams and buildings—if their texture is medium coarse or coarse. This power to build is also shared with the animals, many of which have marked ability, such as the beaver, the bee, birds, and others.

Animal Traits.—When this division of the cranium is large, there is usually a good sense of values and a desire to acquire them, frequently accompanied by marked ability to make money and otherwise acquire

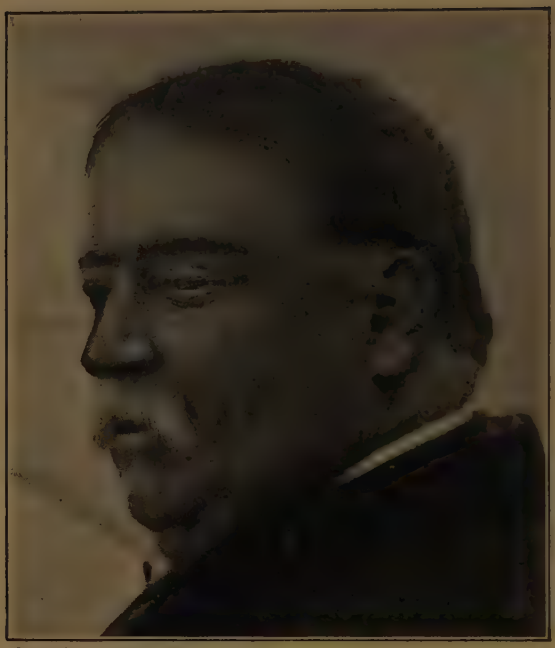


Figure 128. Large, full lower backhead, indicating large cerebellum.

Copyright by Pictorial News Company

Figure 129.—Somewhat deficient base division of cranium.

desirable things. This sometimes amounts to avarice or even miserliness. It is the same desire or instinct which causes the squirrel to hoard nuts and the beaver to lay away stores of food against the winter.

Individuals with the base of the cranium in good proportion like good things to eat and appreciate the niceties in flavor. As a general rule, their digestion and assimilation are good, they are usually robust in health, and their bones are well covered with flesh. This is especially true when the base is wide just in front of and around the ears. (See Figure 127.) People of this type also are energetic and love conquest. They are inclined to take the aggressive, to be courageous, especially to manifest great physical courage. They often have considerable executive ability, are not easily turned aside or discouraged, and work out their plans in spite of obstacles and difficulties.

When the base of the cranium is large, the individual finds life good and enjoys living. He takes care to preserve his life and, barring accident, is likely to live long. When this division of the cranium is predominant, the individual is strongly attracted to the opposite sex and loves intensely and passionately. This is especially the case when the base is both wide and long from the ears back. (See Figure 128.)

All of these qualities of the base of the cranium man shares with the animals, and for that reason we have called the base of the cranium the animal division of the head.

Balanced Development.—When this division is *well balanced* in proportion to the other two, the individual has a proper appreciation of his own

Figure 130.—Large top division of cranium, especially in front.

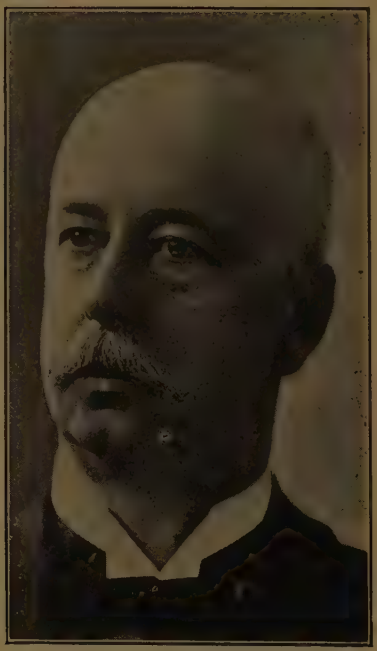


Figure 131.—Large top division of cranium, especially in front.

physical condition and maintains it. He has also a goodly degree of development of the qualities named.

Excessive Development.—When this lower section of the cranium is *excessively* developed and the man lives, as it were, in the lower story of his head, he places too much emphasis on the merely physical pleasures and interests of life and is likely to neglect the higher intellectual and ethical phases of existence. He is gross and sensual. He lives principally to gratify his animal desires and passions.

Deficient Development.—When the base of the cranium is deficient (see Figure 129), all of the qualities named are subordinate in development. The individual is impractical, unobservant, lacks practical judgment, is usually helpless when it comes to performing physical labor, frequently is careless about money matters, neglects his health, becomes easily discouraged, has a slender hold on life, lacks aggressiveness, avoids conflict of every kind, and is indifferent to the opposite sex—all in proportion to the degree of deficiency.

THE MIDDLE DIVISION

When the middle division of the cranium is well developed, the individual takes a keen interest in all of the *material* affairs of life. He is intensely interested in the laws and principles of the material universe, is perpetually asking "why," seeking to discover the causes for all he sees. He is therefore inclined to be philosophical, meditative, and exceedingly critical.

The individual with this type of head is keen in

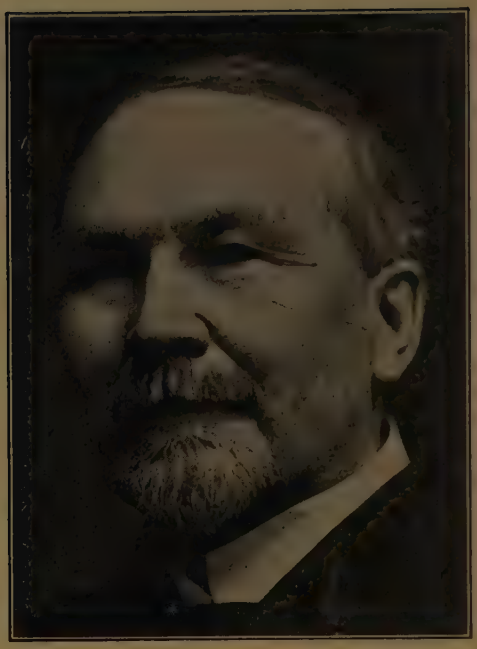


Figure 131A.—Lower two-thirds of cranium predominant. Front view.

Figure 131B.—Upper two-thirds of cranium predominant. Front view.

noting differences and resemblances between things and ideas. His language abounds in figures of speech. This type of mind also thinks and plans. The imagination is often lively and the sense of humor good.

People with this division of the head well developed are oftentimes inclined to finance and commerce, salesmanship, advertising and other vocations which call into play an understanding of people, diplomacy and tact. All these indications are particularly strong when the front part of the middle is well developed.

Vocational Adaptations.—Oftentimes people with the middle division of the head well developed are lovers of the great and beautiful in art and literature, and frequently have creative ability. They write fiction and poetry. They are orators and lecturers. They plan political campaigns and help to carry them to conclusion. They are often cautious and conservative, very fond of people, and may also have intense local loyalty or patriotism. Actors and actresses usually have this division of the head well developed. The social indications are strong when the back part of the middle is wide and full.

Balanced Development.—In short, people who live in the middle division of the cranium are chiefly interested in the universe about them and have ability to accomplish much in the material, external affairs of life. This division of the head, therefore, seems to serve as a kind of balance for the other two. Man's life must be mainly mental, if he is to succeed measurably. It must be lived here and now. He must deal with ideas, people, and things about him. Therefore this division of the head seems to need to

Figure 131C.—Middle division of cranium prominent. Front view.

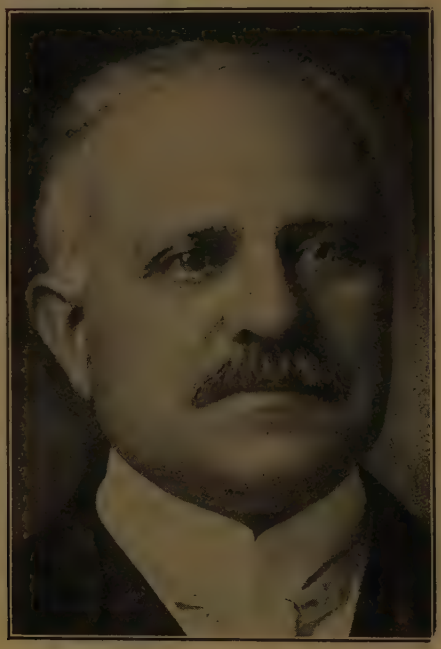


Figure 131D.—Base, middle, and top divisions of cranium well balanced. Front view.

overshadow the other two a little, if there is to be a balanced development.

Excessive Development.—When the middle section of the head is unduly developed (see Figure 124), the individual is materialistic, being interested almost wholly in external affairs and inclined to neglect not only his own physical well-being but all considerations of a future state.

Deficient Development.—When this division of the head is deficient, the characteristics of the individual differ in accordance with its proportion to the other divisions. When the base predominates (see Figure 123), he tends to live a purely animal existence. If the top division predominates, he tends to manifest the qualities indicated by the top division in an excessive degree.

THE TOP DIVISION OF THE CRANIUM

When the top division of the cranium is well developed, the individual manifests an interest in and capacity for ethics, religion, morality, and all other affairs of the higher life. He is sympathetic, benevolent, religious, conscientious.

When the fore part of this division is large (see Figures 130 and 131), the individual is optimistic, hopeful, inclined to be credulous, and has large confidence in others. He is naturally religious. His religious tendencies may manifest themselves in violent opposition to some particular form of religion, as in the case of Robert G. Ingersoll. Or his religion may be purely ethical and not supernatural, as in the case of Elbert Hubbard. Or he may be a devout worshiper in some orthodox church.

Figure 132.—Large top division of cranium, especially at the crown.

Figure 133.
Deficient top division.

Figure 133A.
Deficient top division.

When the crown of the head is largely developed (see Figure 132), the individual is conscientious, persevering, dignified, has considerable self-respect and self-appreciation, is keenly responsive to the respect and appreciation of others, is just and honorable in all his dealings, and is usually known for his constancy and consistency.

Excessive Development.—When the front part of this division is excessively developed, the individual is too sympathetic, often a religious fanatic, foolishly credulous, over-confident, speculative, and blindly optimistic.

When the back of this division is excessively developed, the individual is arrogant, stubborn, egotistical, vain, domineering, and often prolix and tiresome.

Deficient Development.—When this division of the head is deficient (Figures 133 and 133A), the individual is unsympathetic, irreligious, skeptical, cynical, lacking in self-respect, careless of the opinion of others, often inclined to pessimism and discouragement, and is frequently unable to distinguish clearly between right and wrong.

Head Shape and Head Divisions.—A careful comparison of the characteristics indicated by head shape and those indicated by the three divisions of the head is not only interesting but profitable. You can trace the correspondence between the significance of head shape and the significance of the base, middle, and top divisions of the head.

More frequently than not you will find a large development of at least two of these divisions of the head. It may be the lower two-thirds or the upper two-thirds. In some individuals you will find

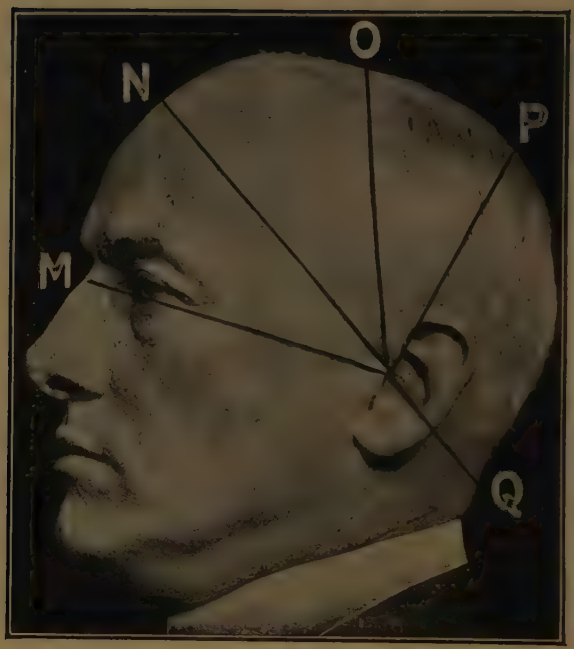


Figure 134. Cranium divided into sections.

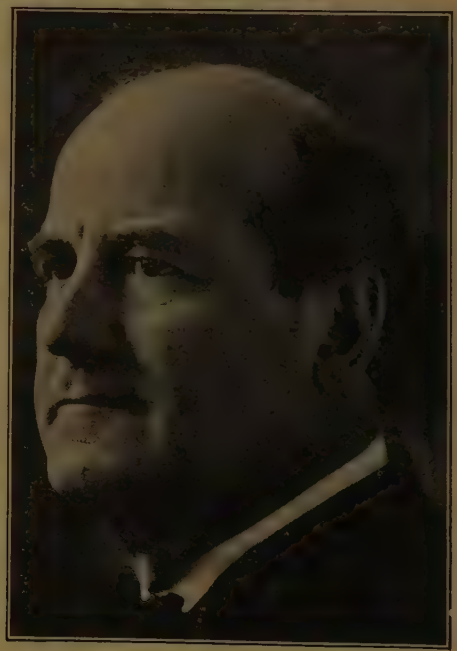


Figure 135.—Large frontal section of cranium.

a splendidly balanced development of all three divisions. Observe carefully which two-thirds predominates.

When a man lives in the lower two-thirds of his head, the development of the base section tends to give all of the activities of the middle section a tendency toward the physical.

When he lives in the upper two-thirds of his head, the development of the upper section gives all of the activities of the middle section a tendency toward the ethical or spiritual.

FOUR SECTIONS OF THE CRANIUM

In order to fix more definitely in your mind the significance of cranial development, and also in order in a sense to check up and verify your observations up to this point, let us divide the head into sections.

The head is divided into sections by drawing five imaginary lines from the external openings of the ears up over the cranium.

The first line runs from the external openings of the ears around the front of the head just below the eyes, as shown in Figure 134, and is designated as the line M.

The second is drawn from the external openings of the ears around the forehead at the hair-line, as shown in Figure 134, and is designated as the line N.

The third is drawn from the external openings of the ears over the top of the head, inclining forward from the ears a little, as shown in Figure 134, and is designated the line O.

The fourth is drawn from the external openings of the ears backward and upward to the occipito-

parietal suture, as shown in Figure 134, and is designated the line P.

The occipito-parietal suture is the juncture of the occipital bone of the skull with the parietal bone and can easily be felt in the skull with the tips of the fingers. It is usually found about at the point designated "P" in Figure 134.

The fifth line is drawn from the external openings of the ears to the back of the head at the lower hair-line, as shown in Figure 134, and is designated the line Q.

It will be seen that by means of these five lines the cranium is divided into four sections:

First, the section between the lines M and N—the frontal section;

Second, that between the lines N and O—the temporal section;

Third, the section between the lines O and P—the crown section;

Fourth, that between the lines P and Q—the back section.

The Frontal Section.—The frontal section is pre-eminently the intellectual region of the head. When this is well developed, as shown in Figure 135, the individual has keen and reliable sense perceptions, a good memory, good judgment, an analytical mind, oftentimes a keen sense of humor, musical ability, artistic ability, and literary ability.

This section may be either long between the lines M and N or high from the external opening of the ear to its outer boundary, or both. When it is well developed, it is both high and wide.

A large development of this section is found in scientists, philosophers, authors, educators, inven-

tors, and all others who work with the purely intellectual faculties of the mind.

The Temporal Section.—The temporal section might well be called the millionaire section of the cranium. While there are many millionaires in whom this section is not excessively developed, and many who have the section large and are not millionaires, an examination of the portraits of the best known millionaires will show a very great many with a large, wide top-head, rounding up like a dome. (See Figure 138.) Study these heads carefully. Note that they are nearly all high-wide-long and medium round. Note also that the middle and top divisions predominate. There is more of faith, courage, aspiration, and sympathy in these men than of grasping greed. The man with wide-low short-round head is more avaricious than these men, but his very greediness defeats its own ends. Those in whom this section is wide, rather than high, love money and are none too scrupulous, oftentimes, in their efforts to secure it. Millionaires and captains of industry love the game—love achievement—love conquest—love power. They have a keen sense of values and look well to the rewards of their efficiency, but money, in itself, is secondary with them. There is an important lesson here for every aspirant to riches.

Men in whom this temporal section is well developed in both width and height have faith, optimism, imagination, the ability to plan and build, an appreciation of values, large financial sense, and ability to carry to successful issue the plans born in their optimism, elaborated in their imaginations, worked out in detail by their powers of build-

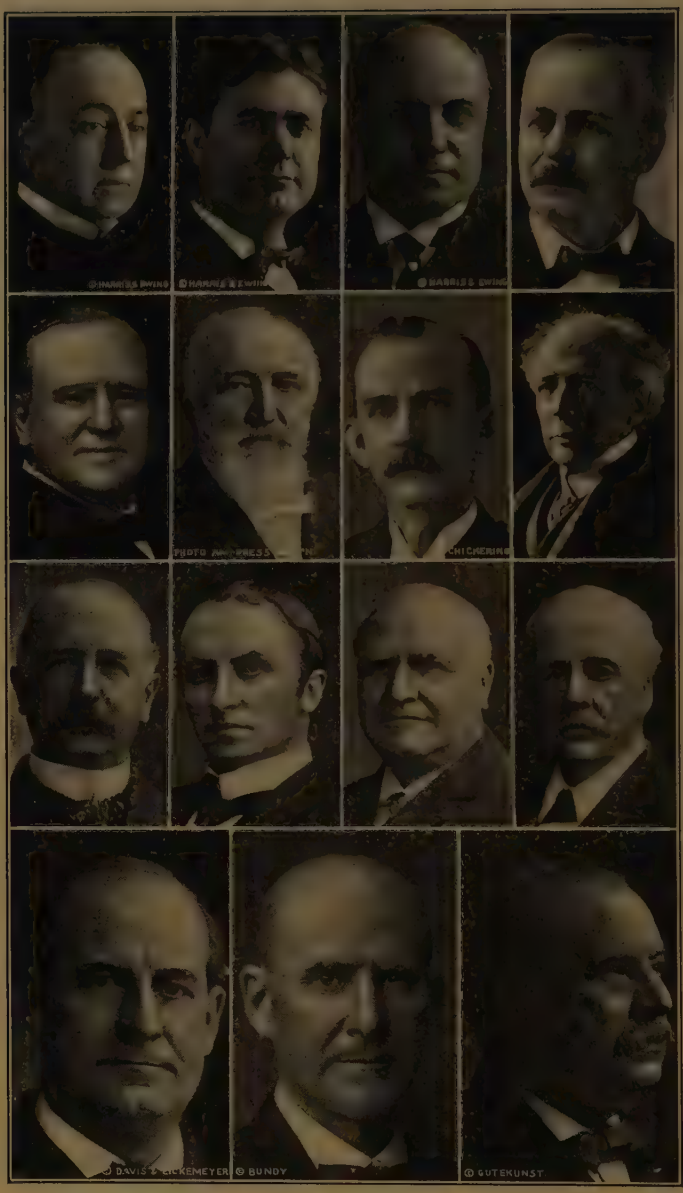


Figure 136.—Group of American and British statesmen and politicians.

ing and contriving, and prosecuted with their natural energy and aggressiveness. When this section is high and narrow, optimism and generosity are indicated, but not so much planning and financial ability.

Since men require faith, optimism, imagination and ability to contrive in order to succeed in politics and statesmanship, this section shows goodly development in those who succeed in these. (See Figure 136.)

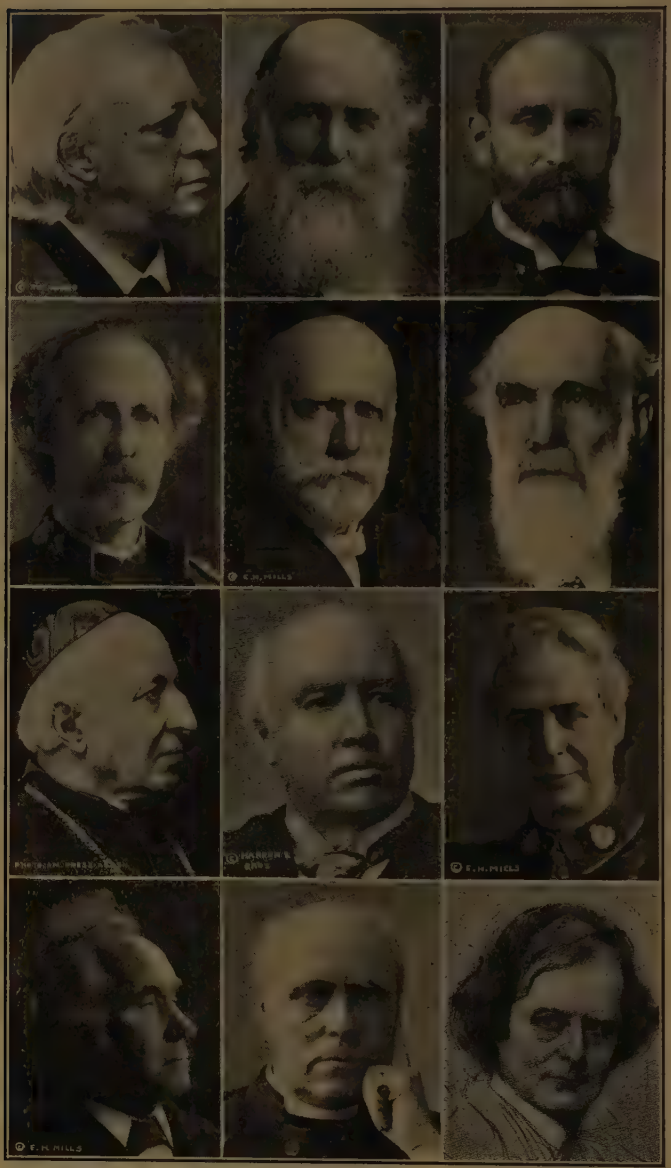
This is also the religious section. Many noted financiers, men of wealth, and politicians are also religious and philanthropic. (See Figure 137.)

The Crown Section.—The crown section is distinctively the section of dignity, self-respect, prudence, firmness, devotion to duty, a desire to appear well before others, and discretion.

Woodrow Wilson is a splendid example of a large development of this section of the head. His administration has been marked by all of the qualities I have enumerated. He is serious, conscientious, and exceedingly cautious. He keeps his own counsel. He has conducted affairs ever with an eye to the approbation of the public, and yet has absolutely dominated not only the executive but also the legislative branch of government. He is inclined to be willful, to go his own way, and it is well known that once he has determined upon a course of action it is useless for anyone to attempt either to persuade or to frighten him out of it. He has a due appreciation of his own dignity and the high position he occupies.

When this section is wide, caution is indicated; when wide and high, prudence and conscientiousness.

The Back Section.—The back section is the social and domestic section of the head. When this



Beecher
Booth-Tucker
Cardinal Agliardi
Parker
Dowie
Torrey
Ingersoll
Archbsp. of Canterbury
Brown
Clifford
Bramwell Booth
Hubbard

Figure 137.—Noted Leaders of Religious Thought.

is largely developed in its upper half, the individual loves his country, his friends, his children, his pets, his flowers, his wife, and nearly everyone he meets.

People with this section of the head largely developed are inclined to be very sociable. They love to be with people. They know how to handle people. They are especially successful as salesmen, politicians, social leaders, teachers, breeders and trainers of animals, and often have a great love for flowers, plants and everything natural and out-of-doors. Luther Burbank has a large development of this section of the head.

If the back-head is long, but poorly developed, flat and thin at the sides, such an individual will have little affection outside of his own home and family circle, as he lacks the social and friendly qualities which would enable him to mingle freely with others.

When the lower half of the back section predominates, as in Figure 139, a passionate fondness for the opposite sex is indicated. This is especially true when this region is both wide and long.

Deficient Sections.—A deficiency in any one of these sections indicates a deficiency in the qualities enumerated for that particular section.

The individual who is deficient in the frontal section is stupid, unobservant, thoughtless, and unintelligent. It is hard for him to learn and hard for him to remember. Often he lacks control over his emotions and desires.

The individual who is deficient in the temporal section is pessimistic, skeptical, cynical, unimaginative, lacks an appreciation of the beautiful, and is oftentimes deficient in financial ability.

The individual who is deficient in the crown sec-

tion lacks self-esteem, is inclined to be careless about his appearance and posture. These people lop and lean and sprawl. Their clothing is loose and ill-kempt. They lack perseverance; are generally careless and reckless. They are deficient in discretion and prudence, and more often than not find it difficult to distinguish between right and wrong.

People who are deficient in the upper half of the back section do not care for children or pets, are inclined to be cold and reserved in their associations with others. Such an individual is often a recluse or hermit. Oftentimes people who are deficient in this section of the head are anti-social. They have no appreciation of their obligations to others and no sense of the structure of society. They are often to be found amongst anarchists, revolutionists, agitators and those who commit crimes against the body politic.

Those who are deficient in the lower half of this section are indifferent to the opposite sex—or love members of it only as friends.

The desirable combination, of course, is the balanced development of all four sections. In most people three at least are well developed and their characteristics are indicated by a combination of the qualities of those sections which are well developed.

In almost every head you observe you will find some one section deficient and some one section predominant. There is no better practice in character analysis than to observe these sections carefully, to know which section in every head is best developed and which is least developed, and to check up in the character of the individual wherever possible the

indications of these predominant and deficient sections.

THE FOREHEAD

The forehead reveals much by its size, its form, and its proportions.

Foreheads Classified.—The forehead may be high or low, wide or narrow. It may be wide above and narrow below, or wide below and narrow above. It may also be prominent above and deficient below, or it may be prominent below and deficient above. The forehead may also be prominent in the middle and low at the sides, or prominent at the sides and flat or depressed in the middle.

All of these variations of the forehead are significant.

The Forehead Defined.—The forehead is that part of the cranium included between the eyebrows and the hair-line above and below, and the hair-line at the sides, as shown in Figure 140.

Understand, of course, that the hair-line does not necessarily mean the edge of actual growth of hair. In the case of one who has become bald, it can readily be recognized as the juncture of the scalp where the hair ought to grow with the naturally bare skin of the forehead. The scalp adheres to the skull, so that when the eyebrows are raised and the forehead wrinkled up the forehead wrinkles but the scalp remains smooth.

The Balanced Forehead.—The balanced forehead is just twice as wide as it is high. In other words, it is just twice the distance from hair-line to hair-line on the sides that it is from the eyebrows to the hair-line on the top.

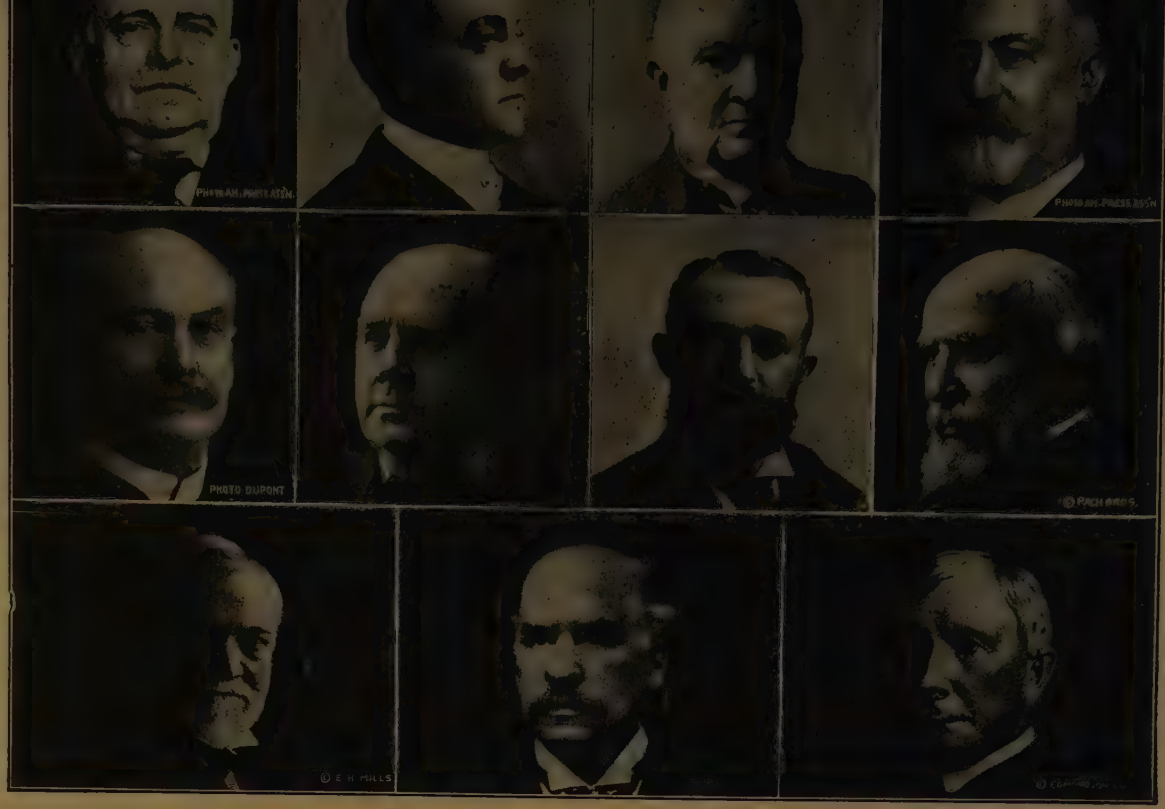


Figure 138.—Group of American millionaires.

Figure 139.—Large lower back section of cranium.

Figure 140.—Boundaries of the forehead.

Photo Copyright by A. Dupont, New York

Height of forehead, therefore, means distance from the eyebrows to the hairline; width of forehead, the distance from hair-line to hair-line across the middle of the forehead.

When a forehead is high proportionately, it is more than half as high as it is wide. When it is wide proportionately, it is more than twice as wide as it is high. When it is both high and wide, it is higher and wider than the average forehead.

The forehead divides itself naturally into upper and lower sections. In many foreheads there is a marked indenture between the two divisions running horizontally across the middle of the forehead.

The Perceptives.—The degree of development of the lower division of the forehead is an indication of the degree of development of all the perceptive faculties.

The more prominent this division of the forehead, the keener and more accurate the powers of observation, the better the judgment of size and weight, form, color, the keener the sense of passage of time. When it is wide as well as prominent it indicates a musical ear, and ability to add, subtract, multiply and otherwise deal with numbers.

The individual in whom this division of the forehead is well developed has the practical type of mind. He demands facts, forms his judgments and makes his decisions upon the presentation of facts, statistics, data and other information readily apprehended by the physical senses. He is keen and penetrating in intellect and is always more interested in the facts and the practical side of questions than in the reasons for facts and theories about them.

The Reflectives.—When the upper division of the

Figure 141.—Chopin, Composer.

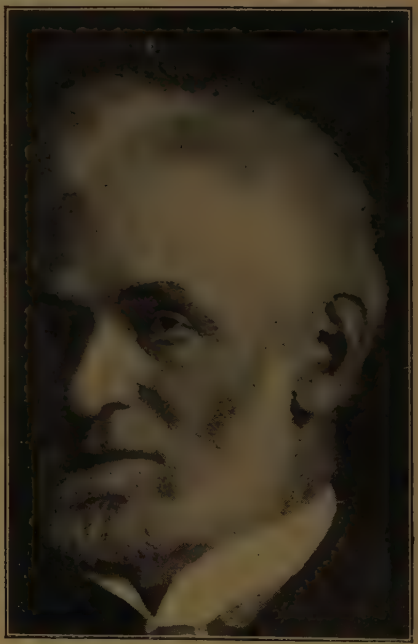


Figure 142.—The late F. F. Browne, Editor of "The Dial," and one of the most noted literary critics of his day.

forehead is well developed, the individual has the ability to reason about facts, to theorize, compare, criticise, analyze. He is naturally inclined to reflect and ponder over what he sees and hears, to find causes and trace causes to their effects. He is inclined to be meditative and even absent-minded, and often seems unable to think of more than one thing at a time.

This type of mind is naturally theoretical instead of practical, and manifests a decided preference for philosophy, abstractions, the occult, and all of the intellectual processes that deal with thoughts and ideas rather than with things.

When development in this region is extreme, the individual is so dreamy, theoretical, and absent-minded as to be almost unbalanced. This is especially true if other parts of the head are deficient. Strindberg, see Figure 145, who shows a large development here, was a genius in poetry and play writing, but his product is extreme, erratic, radical, and marked by excessive pessimism and melancholy.

High, Narrow Forehead.—When the forehead is high and narrow, the individual has marked intellectual abilities but rather narrow views. He is therefore inclined to specialize.

Broad, Low Forehead.—When the forehead is broad and comparatively low, the individual is broader minded and able to generalize. Instead of securing all the information possible on some one subject, he gets a smattering of knowledge along many different lines. He is usually broad in his views and readily accepts new truth.

Wide Above—Narrow Below.—When the forehead is wide above, the individual is imaginative and

Michelson
Mme. Curie
Huxley
Saleeby
Roentgen
M. Curie
Haeckel

Figure 143.—Group of scientists, showing square foreheads.

constructive, idealistic, has a keen sense of humor, is inventive and philosophical. When it is wide below, he is mathematical, practical and orderly.

The pure type of round forehead has a rounded hairline, and it also rounds out in front. That is, it is a segment of a sphere. This is well illustrated in the foreheads of Zeppelin and Octave Chanute, Figure 144. (See also frontispiece of Lesson VIII.)

The pure type of square forehead has a front that is rather flat and that meets the sides of the forehead with a somewhat angular effect. The whole forehead has something of a boxlike, "cornered" effect, the corners being found in the upper part. The hair line may also be square. Madame Curie (Fig. 143) and Horace Mann (Fig. 148) are good illustrations. (See also Figures 100 and 119.)

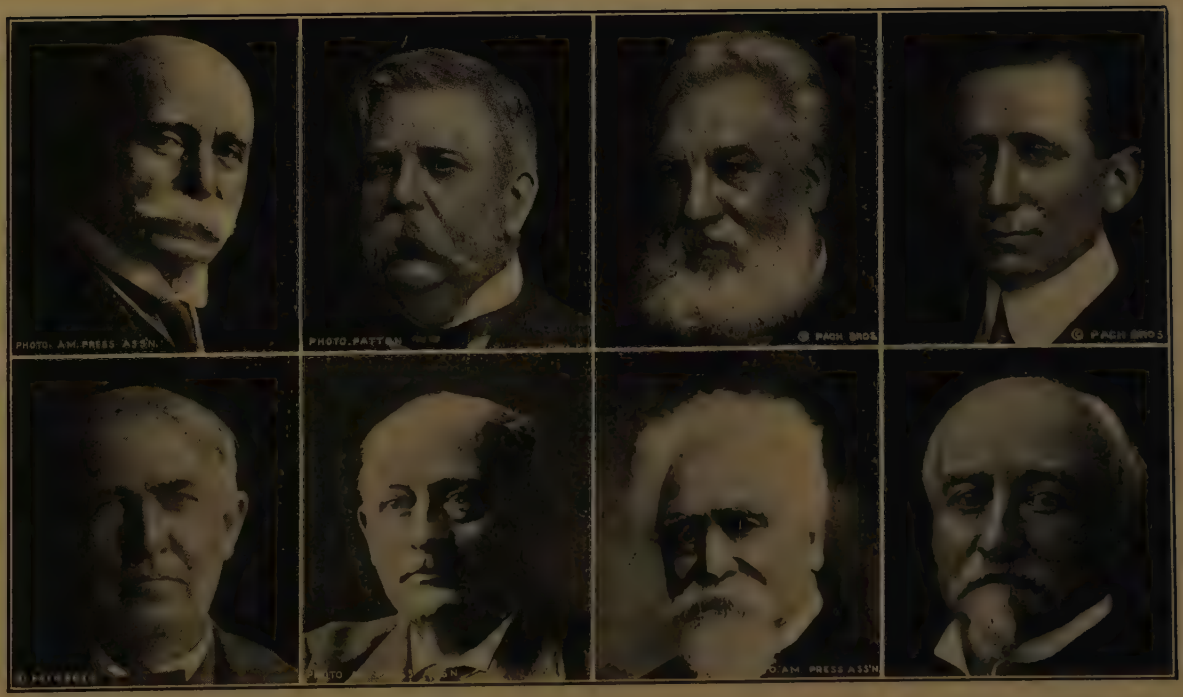
These are the pure types. Many foreheads will present both square and round elements and must be classed as *medium square* or *medium round,* according to which predominates. You will recognize the round and square forehead as merely another way of classifying round and square front-head.

When the forehead is full in the middle above, the individual is analytical and critical. (See Figure 142.)

When it is full below in the middle, he loves stories, novels, and history. The story writer and novelist, however, have rather a good development of the upper part of the forehead, which is usually both full and wide. (See Figure 145.)

PART TWO

In making observations for the proportions of the three divisions of the head it will be necessary, first,



Zeppelin
Edison

Westinghouse
Amet

Bell
Maxim

Marconi
Octave Chanute

Figure 144.—Group of inventors and engineers, showing round foreheads.

to study each division carefully and to compare it with the other two and with the divisions in the heads of other people. As you improve by practice, however, you will soon be able to take in the relative proportions of the three divisions of the head at a glance. They will tell their story to you as clearly and as readably as three words in a sentence.

Observing the Base of the Cranium.—Beginning with the base of the cranium, observe the distance from the opening of the ear to the back of the neck and to the middle of the brows. If these lines are long, there is a large development of this division.

The head in such case appears heavy in the region of the back of the neck, the ears, and eyebrows, and seems to taper from these points upward. It may even resemble a pear in shape—with the large end down. The relative length of the lines from the openings of the ears forward and from the openings of the ears back, of course, indicate whether the front or the back part of the base predominates.

When this section of the head is very largely developed, the head is also wide, and very frequently the individual is of the vital type.

Observing the Middle Division.—When the middle division of the head is large, the lines from the opening of the ear to the hair-line in front and to the middle of the back-head behind are long, as shown in Figure 124.

The longer these lines, the larger is the middle division of the head.

In such cases the head is frequently wide at a point between the ears and the top rather than at the

A. Strindberg
Alfred Noyes
Count Tolstoy

Edward Bellamy

Rudyard Kipling
E. A. Poe
Henrik Ibsen

Figure 145.—Distinguished authors.

ears. On some heads the forehead, the upper parts of the sides of the head, and the middle of the back-head are bulging and full, as partly shown in Figure 146. The individual has a high, wide, large forehead and a full, round back-head; not at, but above, the back of the neck.

Observing the Top Division.—Excessive development of the top division of the head gives us the top-heavy head. This is the head which resembles the pear—with the small end down. It is distinctively the head of the mental type. In this case the lines from the opening of the ear to the top of the head are long.

Let me remind you again that the only way to develop the power of accurate observation of these proportions is by guessing; then measuring over and over upon as many subjects as possible, until the eye is trained to distinguish even slight differences in proportion.

In observing the development of the different sections of the head, the external openings of the ears are always the starting points. These proportions are not so difficult to observe as the divisions of the head. The eye very soon becomes trained in comparing the distance from the external opening of the ear to the brows with the distance to the hair-line in front, to the middle of the top-head, to the crown, and to the back of the neck.

Checking and Comparing Data.—In making deductions from observations, never draw a definite conclusion without checking and comparing data. An example will make plain my meaning. Energy is indicated by a convex nose, by motive structure, by elastic consistency, by a well-developed nose sec-

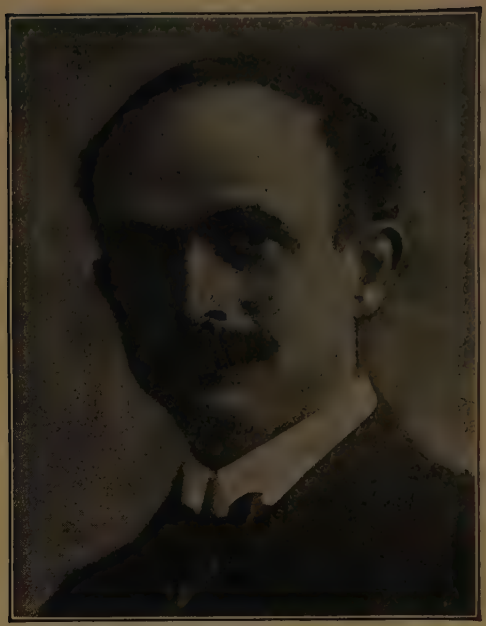


Fig. 146.—Middle division of cranium bulging in front and sides.

Photo by Underwood & Underwood, N. Y.

Figure 147.—Top division excessively developed.

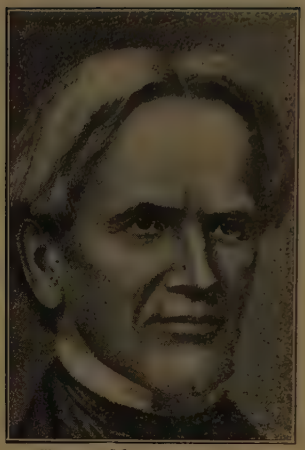
tion of the face, and by a wide head. Before drawing your conclusions as to the energy of any individual, therefore, observe and compare these variations. The more of them that indicate energy, and the more pronounced the indication in each case, the greater the energy of the individual.

Again, a head largely developed in the temporal section is one indication of optimism. Blonde coloring is another indication of optimism. Do you always find a large development of the temporal section with blonde coloring? If not, what is the indication? Simply this: A large temporal section of the head and blonde coloring both indicate optimism. If they are both present in the same individual, then there are two indications of optimism in that individual and he is more optimistic than one with blonde coloring and a deficient temporal section, or one with a large temporal section and brunet coloring. As a matter of fact, an individual with deficient temporal section has little optimism, no matter what his color. You see, now, why it is impossible to draw definite conclusions until you have carefully checked up all the variables.

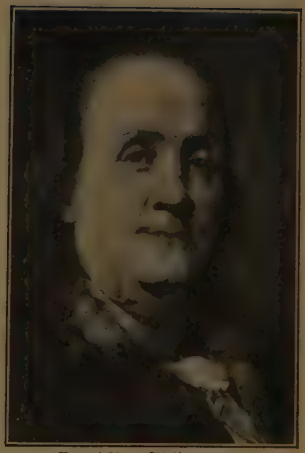
You have learned that a large development of the crown section of the head indicates constancy, caution, carefulness, conscientiousness, dependability. You have also learned that these are indicated by brunet coloring.

Is it your observation that brunets have a larger development of the crown section of the head than blondes, just as blondes have a larger development of the temporal section of the head than brunets?

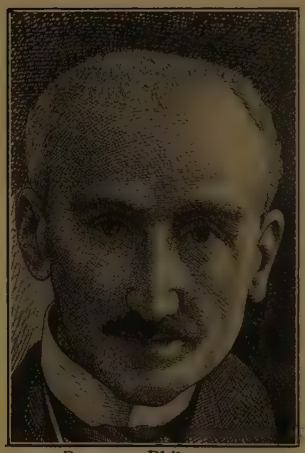
In case a brunet has a deficient crown section or a



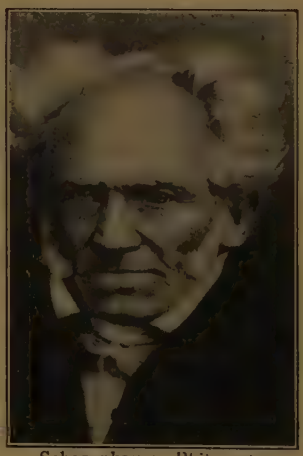
Horace Mann, Philosopher.



Franklin, Philosopher.



Bergson, Philosopher.



Schopenhauer, Philosopher.

Figure 148.—Group of philosophers, showing development of upper half of forehead.

large development of the temporal section, what are the indications?

In case a blonde has a large development of the crown section, what are the indications?

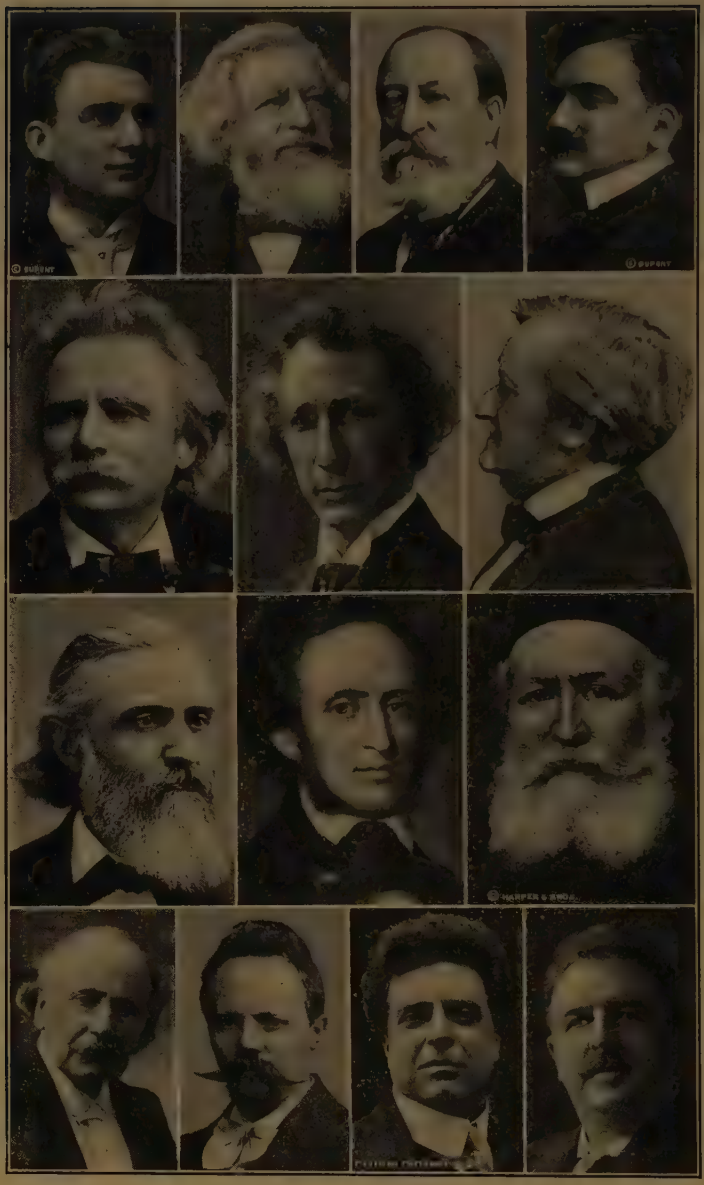
The Back Section.—Study politicians, salesmen, fond fathers and mothers, social workers, chicken, dog and cat fanciers, horticulturists, floriculturists, and libertines for the back section of the head. Observe the different degrees of development in each and the different part of the back-head developed.

Try to figure out why one man is exceedingly friendly and social in his nature, attracting others to him and tying them to him, manifesting affection and loyalty simply because he loves people and likes to be with them, and with no other purpose in view, and why another is suave, plausible, cordial, effusive, and friendly in behavior, but always with an eye open to the main chance for himself. You will find your answer in the proportionate width of the head. It is the wide-headed man who loves to acquire for himself.

Study the difference between the man who loves his family and his home, his garden and his pets, and the man who seeks the opposite sex simply for the temporary gratification of his physical passions.

Observing the Forehead.—Success in the observation of the forehead depends very largely upon a thorough knowledge of the principles, plus a careful study of the foreheads of those who manifest the different aptitudes and characteristics indicated by the forehead in extreme degree; that is to say the pronounced types.

In studying the high, narrow forehead of the specialist, observe very carefully the shape of fore-



Dippel Guilmant Saint Saens Caruso
Greig Sauer Wagner
Damrosch Mendelssohn Gounod
Massenet Humperdinck Mascagni Herbert

Figure 149.—Group of musicians, showing forehead wide below.

head of men who have carried their specializing to an extreme, men like Curie, in Figure 143.

Then study the bulging foreheads of philosophers, like Franklin, Schopenhauer, and Bergson (Figure 148); the square foreheads of scientists, like Curie, Saleeby, Haeckel, Michelson, Roentgen, and Huxley (Figure 143); the full, round foreheads of inventors, like Edison, Zeppelin, Maxim, Amet, and Chanute (Figure 144).

When studying the forehead wide below and narrow above for mathematics or music, study the foreheads of musical prodigies like Dippel, Greig, Damrosch, Massenet, Guilmant, Sauer, Mendelssohn, Humperdinck, Saint Saëns, Mascagni, Caruso, Wagner, Gounod, and Herbert among musicians; Herschel and Simon Newcomb among mathematicians (Figures 149, 149A and 149B).

For the forehead wide above, study Mark Twain, Bill Nye, Irvin S. Cobb, Tom Masson, Nast, Marshall P. Wilder, and other humorists. (See Figure 150.)

Note the full development of the upper part of the foreheads of playwrights, novelists and poets, like Poe, Bellamy, Ibsen, and Strindberg (Fig. 145).

THE FIRST SEVEN VARIABLES

With this lesson you close your study of the first seven variables. These variables indicate almost wholly the inherent capacities and qualities of the individual.

Indicate Inherent Traits.—It is true that by environment, education, experience, training, and men-

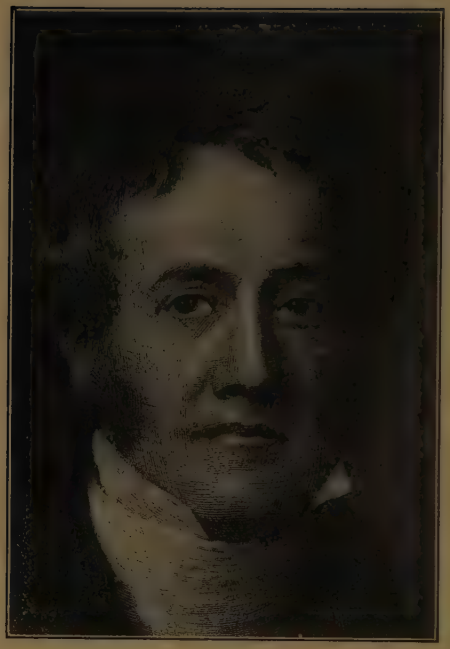


Figure 149A.—Sir John Hershel, English astronomer and mathematician forehead wide below.

Copyright, 1897, by Harper & Brothers

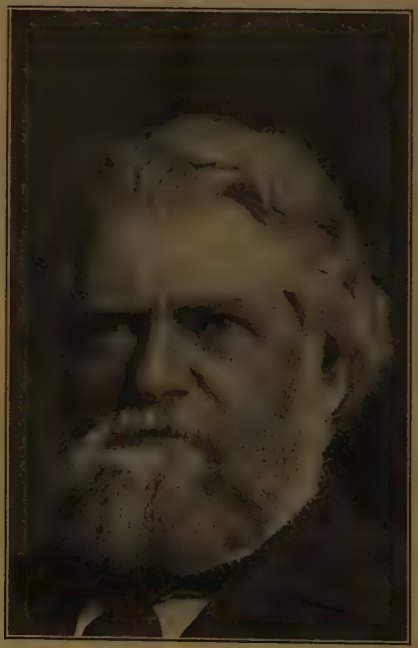


Figure 149B.—Prof. Simon Newcomb, American astronomer and mathematician, forehead wide below.

tal and physical habits resulting from these, any individual may change to a certain degree his color, form, size, structure, texture, consistency, and proportion.

I have seen people who have developed to a certain degree deficient noses, who have changed somewhat the shape of their heads, who have either refined or coarsened their texture, hardened or softened their consistency.

Such changes do occur. They are not, however, very radical changes, and any marked change in any one of the seven variables after an individual has attained his growth is comparatively rare.

On the average, I should say that fully ninety per cent. of the variations of these seven variables are inherent. Furthermore, any changes an individual may work in these variables and their indications in his character become, for the purposes of character analysis, practically the same as if they were part of his inherent physical and mental equipment.

Is heredity, then, so potent and environment—using the word in its broadest sense to include all that happens to an individual from the time of his birth—so unimportant in comparison?

Influence of Heredity and Environment.—Before answering that question, let me say that I am not a party to any controversy as to the relative effectiveness of heredity and environment in determining physical properties and forming character.

I have called the variations in these seven variables inherent. I have no quarrel with those who claim they are the result of early environment. It is enough, for the purposes of this science, to state that I find them fairly well established and only

Marshall P. Wilder
Bill Nye
Tom Masson

Irwin S. Cobb
Thomas Nast
Mark Twain

Figure 150.—Famous Humorists.

moderately subject to change by the time the individual has reached puberty.

For convenience, however, let us consider that the variations of the first seven variables are almost wholly inherent, since they represent physical and mental equipment which becomes very largely fixed comparatively early in life.

The Potent Influence of Environment.—Now, to answer your question: In some respects environment is even more potent in its physical, mental, and psychical results than heredity.

Occasionally you see a big, fine-looking man, broad-shouldered, erect, well proportioned, with a large, noble-looking head, well developed, strong features, and in many respects a most imposing appearance.

You may have said: "There is a big man. He's a railroad president, or a banker, or a big manufacturer. Certainly in some department of business he occupies one of the seats of the mighty."

And then you have learned that the man is a barber, or a floor-walker in a department store, or timekeeper for the street cleaning department.

Perhaps on close observation you found that the man was about 30 on the color scale, convex upper —concave lower in form, 5′ 11″ tall, weight 180 pounds, motive-mental-vital in structure, medium fine in texture, elastic in consistency, with a wide-high-long-square head, well balanced in its various divisions and sections, and a high, broad forehead.

All of these are splendid indications and you cannot understand why the man has remained all his life in some obscure or menial position.

It is possible that a more careful and detailed ob-

servation and longer practice in the application of the principles of the first seven variables might give you a clew to the solution of the problem.

But, whether you found such a clew or not, you would find the answer to your questions in consideration of the eighth and ninth variables and their application to the individual before you.

In the same way, some men are unprepossessing in appearance. They seem to have a deficient inheritance of capacity, ability, and nobility, and yet you find them successful and worthy. The eighth and ninth variables will tell you why.

What the Eighth and Ninth Variables Indicate.—If the first seven variables indicate the qualities, aptitudes, characteristics, disposition, and traits one either inherits or develops during the early years of his environment, expression and condition, properly understood and interpreted, tell you what one has done with this equipment. They tell you of the education, training, experiences, and later environment, of mental and physical habits, of prevailing emotional states.

Thus the first seven variables reveal the story of one's evolution and ancestry. Expression and condition reveal the history of his life.

A Word of Encouragement.—In your study of the first seven variables you have found, doubtless, considerable that has been difficult and technical. You have, however, attacked these difficulties with courage and have either conquered them or are in a fair way to conquer them.

You have been observing, comparing, verifying, investigating, and thus slowly but surely perfecting yourself in the interpretations of these seven varia-

bles and their indications, both singly and in combination.

You may therefore be congratulated upon having become fairly well acquainted with the most difficult part of this course. From now on you will find the subject less technical, less difficult, and I trust more entertaining.

Not only this, but having laid your foundation principles strongly and attained a fair degree of facility in observation and comparison, your future progress will be far more rapid and far more satisfactory.

The Alphabet and Grammar of Character Analysis.—The science and art of character analysis by the observational method may be compared to the science and art of reading.

The child used to learn to read first by laboriously learning to identify each of the twenty-six letters of the alphabet. In the same way, you are learning to analyze character by first laboriously learning to identify each of several variations of the first seven variables. These are the letters and they form the alphabet of human character.

After a time the child learns to combine the different letters of the alphabet to form words. In his struggles with words he has to spell each one carefully before he recognizes it. Little by little, however, he grows in facility, until he no longer is compelled to say "c-a-t," identifying each letter separately, but instantly recognizes the word "cat" as a whole.

In the same way, at first you find it necessary to make the different combinations of variations, a few at a time laboriously, and to think out carefully the

significance of each combination. Already, however, you are growing in facility and can recognize words on the page of human character at a glance.

With practice the child learns to read whole sentences, and even whole paragraphs, with one sweep of the eyes. So you in time will learn to see all of the essential characteristics of any individual in one brief moment of concentrated observation.

A Comprehensive Chart.—In order to assist you to a more comprehensive grasp of the variables, I have prepared a chart, one section of which accompanies each lesson from Two to Nine inclusive. As you see, at the heads of columns across the top of this chart are placed technical terms for each of the principal variations under each of the variables.

At the extreme left hand of the chart, dominating spaces that cross all of the columns, I have arranged designations so that the chart will show what each variation indicates—physically, intellectually, emotionally, volitionally, socially, and otherwise. There is also a space for suggested vocations, and spaces for things to be avoided and things to be cultivated, as indicated by each particular variation.

A careful study of this chart will repay you amply for the time and effort expended, but even more valuable than abstract study will be the use of the chart in the analysis of definite individuals. In making these analyses, use the standard analysis blank, as follows:

MAKING A FORMAL ANALYSIS

It may be helpful if I outline briefly the best method for a formal analysis on the blank furnished with this lesson.

Gathering Data.—After filling in name, address, age, sex, nationality, and occupation, write down color, indicated by the individual's place on the color scale.

Second, form of forehead, eyes, nose, mouth, and chin, using the cipher code.

Third, size, including height and weight.

Fourth, structure, indicating which of the three elements of structure predominates and to how great a degree, which comes second, and which third. Indicate the degree of each element by plus, equality, and minus signs to denote excess, balance, and deficiency.

Fifth, indicate texture by the individual's place on the texture scale.

Sixth, indicate consistency and flexibility by the symbols of the standard code.

Seventh, mark the degree of masculinity or femininity in physical proportions.

Eighth, indicate proportion of the three sections of the face in their order of development, using plus, equal, and minus signs to indicate degree.

Ninth, indicate the head shape, as for example, wide-high-long-square.

Tenth, indicate the proportion and degree of development of the base, middle, and top divisions of the head. That which is largest is marked 1, the second in development 2, and so on. Plus, equal, and minus signs indicate degree.

Eleventh, indicate the degree of development of the frontal, temporal, crown, and back sections of the head by number and symbols.

Twelfth, describe the forehead, using check marks and plus, equal, and minus signs.

Checking and Comparing.—Having thus carefully written out the variations of each of the seven variables in the individual to be analyzed, write upon a separate sheet the leading indications of each of these variations, carefully checking and comparing all indications. In making this interpretation you will be greatly assisted by the chart.

Drawing Conclusions.—When you have written all of these, study them all carefully in the light of what you have learned in these lessons, and of experience. Then in the spaces provided, write a brief but comprehensive characterization of the individual, including his physical traits, his intellectual, emotional and volitional characteristics, his strong points and his weak ones—positives and negatives—his special aptitudes and the vocation or vocations in which he would be successful, what he ought to cultivate and what avoid in order to improve himself and make the most of his talents and opportunities.

Begin with Pronounced Types.—You will find it far easier to write such analyses as these if you begin by analyzing extreme pronounced types, such as a blond-convex, mental-motive-vital, of fine texture, hard consistency, exceedingly masculine, with largely predominating nose section, a wide head, high in the crown, and with a largely predominating middle division.

Contrast such a type as this with a brunet-concave, vital-motive-mental, coarse texture, soft consistency, feminine proportions, predominant mouth section, narrow-low-round head, with the base division and back section predominating.

Verify Your Analyses.—When you have made

your analyses, proceed to verify them. Study the individual carefully from every angle. Learn as much as you can about him by observation, by conversation with him and with his friends. If you find apparent discrepancies between your analysis and the facts, go over your analysis carefully, correcting your observations if necessary, verifying or correcting your judgment in making the interpretation. Study the individual analyzed. Never give up until you have discovered the truth.

Analyze Yourself.—You will find it excellent practice to write out your own analysis as fully as possible. Study your strong points and your weaknesses. Perhaps you will find possibilities within yourself you never guessed.

Compare Similar Individuals.—Another good exercise is to write out a complete analysis of your father, brother, or best friend. Then choose some individual, if possible, whose characteristics you know little or nothing about, but who resembles in appearance your father, brother, or friend. Trace this resemblance. Find out in what respects the two look alike and in what respects they differ. Then proceed to study the stranger until you trace his resemblance in character to your relative or friend; also his differences in character. Relate these resemblances and differences to resemblances and differences in physical appearance.

Analyze Public Men.—Another splendid exercise is to take portraits of well-known public men, together with such descriptions of them as you may be able to find, and from these write their analyses. With these analyses in hand, study the characteristics of these men as described in the public prints,

and relate as far as possible their achievements, actions, habits, preferences, etc., to your analyses of them. You may find that the newspapers and magazines are sometimes in error in their judgments.

Standardize Procedure.—In making these formal analyses always follow the same procedure. In this way you will learn quickly how to place each individual in his proper pigeonhole.

To say that a man is 20 on the color scale, convex upper—concave lower, 5′ 8″ tall, weighs 135 pounds, is mental-motive-vital, fine texture, elastic consistency, very masculine, with a predominant nose section of the face; a wide-high-long-round head, most prominent in frontal and temporal sections, with high, wide, round forehead, most prominent at the brows, classifies that man so accurately, so far as his inherent capacity is concerned, that you have not only a fair mental picture of his appearance but a pretty accurate idea of his aptitudes, character, disposition, and general behavior.

You see, this enables you to describe a man in a very few words, and yet to describe him in such a way that you know all of the most important things about him physically, mentally, and psychically.

You are now learning to read rapidly and accurately the unmistakable sentences and paragraphs of self-revelation which Nature has written all over every human being with whom you come in contact.

LESSON NINE

REVIEW QUESTIONS FOR SELF QUIZ ONLY

(NOTE: These questions are given to check yourself up to see how thoroughly you have mastered the lesson. Answers are not to be sent to the author or the publisher.)

I. Name three physical and three mental characteristics of an individual with the base division of cranium predominating.

II. Why is it desirable that the middle division of the cranium should predominate slightly over the other two?

III. Which section of the cranium is preëminently intellectual in its indications?

IV. Name three traits of character indicated by a large crown section of the cranium.

V. Name three traits of character indicated by a deficient back section of the cranium.

VI. What proportion of forehead indicates natural musical talent?

VII. What is the usual shape of forehead of a philosopher?

VIII. What is indicated by a high, narrow, square forehead?

IX. What are the balanced proportions of the forehead?

X. From what common points are the head sections drawn in the application of this science?

(See next page for Standard Code of Symbols.)

STANDARD CODE OF SYMBOLS

The Science of Character Analysis by the Observational Method

Color—Figures from scale of pigmentation.
Form—Convex ⌒; plane —; concave ⌣.
Size—Height in feet and inches; weight in pounds.
Structure—Relative development indicated by figures 1, 2 and 3. For example, mental-motive-vital type as follows:

Structure { Mental 1 / Motive 2 / Vital 3

Texture—Figures from texture scale.
Consistency and Flexibility—Check marks opposite descriptive words.
Proportion—Check marks for masculine or feminine; 1, 2 and 3 for face proportion; check marks for head-shape; 1, 2 and 3, and 1, 2, 3 and 4 for cranium; check marks for forehead.
Expression—Use descriptive adjectives.
Condition—Excellent ++; Good +; Fair =; Poor —; Very poor ——.
Hands, Fingers, and Thumbs—Check marks.

The symbol ++, used with any other symbol indicates excessive develoment; the symbol + indicates large development; the symbol = indicates medium development; the symbol — indicates deficient development; the symbol —— indicates extreme deficiency. For example, "Forehead ⌒ ++" means Forehead, excessively convex;

"Structure { Mental 3 — / Motive 2 = / Vital 1 ++ " means "Vital excessively developed, motive moderately developed, mental, deficient." These symbols are also used with check marks to indicate degree.